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THE CHEMICAL MARKET AUTHORITY

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Berkeley Bets on Sugar

One of the medium-sized synthetic organics firms — Berkeley Chemical Corporation, Berkeley Heights, N. J.—thinks it can sweeten its future via sugar chemistry.

Specifically, Berkeley is banking its hopes on sucrose esters, a new class of surfactants. It plans to produce the new materials under the terms of a patent licensing agreement with the Sugar Research Foundation.

At a press conference in New York last week, Robert J. Milano, Berkeley president, revealed that his company expects to begin pilot-plant operations on the sugar esters sometime in January. If sufficient demand builds up, he added, commercial production could be started in mid-1957.

Limited runs were made at the Berkeley plant last November in connection with the initial process development work conducted by Foster D. Snell, Inc., New York, for the Sugar Research Foundation.

A spokesman for the foundation thought that, if all goes well, sugar esters could find an annual market for some 10 million pounds within the next few years. Cited was the ready availability of the necessary raw materials—sugar and fat or oil.

Among the claims made for sugar esters are:

- They will be the least expensive nonionic detergents on the market when they become available in substantial quantity.
- As a class, they are odorless, tasteless, non-toxic and non-irritating.
- They are among the very few nonionic surfactants that are solids.
- They are probably the only water-soluble efficient detergents that are completely safe for human consumption.

For these reasons, it is felt the esters will find wide application in the food, pharmaceutical, toiletries and feed industries.

Petrochemicals Picture Seen Affected Significantly in Europe By the Suez Canal Situation

The Suez crisis, which already has cut heavily into European oil supplies, is likely to have a significant effect on that continent's production of petrochemicals, the Manufacturing Chemists' Association was told last week at its sixth semi-annual meeting in New York. This assessment was made by George L. Parkhurst, vice-president and a director of Standard Oil Company of California, San Francisco.

"However," he pointed out, "the magnitude of this effect will obviously depend on the supplies of oil available to individual companies since there is no general system of rationing or allocation in operation."

Sees No Real Let-Up in Competition

Nevertheless, Mr. Parkhurst warned the American chemical producers not to look for any real let-up in competition from Europe. "I would not take too much comfort in the Suez crisis," he declared, "even though it may have a very substantial short-range impact on individual companies."

The European economy as a whole, he thought, will suffer greatly. He cited these as the five key factors:

- Cost of the operation in Egypt.
- High cost of shipping dry cargoes as well as oil by circuitous routes.
- Loss of trade resulting from limited transportation facilities.
- Inflation of tanker rates which have gone sky high.
- Purchase of oil in the Western Hemisphere (US and Venezuela) for dollars, which has already gotten under way and will be stepped up.

"I venture to predict," Mr. Parkhurst asserted, "that the term 'dollar shortage' will again become a familiar one in Europe."

The president of the United States Steel Corporation, Pittsburgh, Pa., came forward with a novel idea to ease the nation's shortage of scientists.

Clifford F. Hood suggested that pos-

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MARKET RESEARCH CHIEF: Robert H. Farrow, named director of market research for Southern Nitrogen Company, Savannah, Ga.

General Electric Sells Part Of Alkyd Resin Interests to ADM

General Electric Company has signed a contract for the sale of a portion of its interests in the manufacture of alkyd resins to Archer-Daniels-Midland Company, Minneapolis, Minn. According to S. L. Brous, general manager of General Electric's materials department, included in the transaction are finished goods inventories, equipment, formulations and manufacturing specfications related to the company's former production of "Glyptal" alkyd resins at Schenectady, N. Y.

ALTHOUSE PRESIDENT: Howard F. Bjork, president of Index Chemical Company, a subsidiary of Pennsylvania Salt Manufacturing Company, who on January 1 becomes president of Althouse Chemical Company, Reading, Pa., a division of Crompton & Knowles Corporation. Mr. Bjork succeeds Dr. C. Scott Althouse, president of the Reading firm since its founding in 1917, who has been elected chairman of the board.

"The operation of General Electric's resin business at Anaheim, Calif., and the Toronto, Ontario, business of the Canadian General Electric Company, Ltd., are not affected by this contract," Mr. Brous said.

General Electric's Anaheim plant will continue to use present identifying code numbers for its formulations of "Glyptal" alkyd resins, many of which have been independently developed at the west coast location.

According to W. G. Andrews, assistant vice-president and manager of Archer-Daniels-Midland's resin division, "the purchase will add an outstanding group of industrial resins to ADM's present line of 'Aroplaz' and 'Aroflat' resins."

"ADM hopes to serve 'Glyptal' customers without interruption by employing sales and technical personnel who have been intimately associated with General Electric's development of the 'Glyptal' resin line," Mr. Andrews added.

Mr. Brouse said General Electric's decision to sell was based on the cost and time factors involved in reconstituting resin-making facilities equivalent to those formerly in production at the company's Schenectady plant. These facilities were

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Drug Producers Schedule Narcotics Bill Conference

A joint committee of the American Pharmaceutical Manufacturers' Association and the American Drug Manufacturers Association has a conference scheduled for December 11 with officials of the federal Bureau of Narcotics on the Karsten narcotics bill, HR 11993.

This bill, which was introduced late during the last session of congress, provides for the licensing of basic manufacturers of narcotic drugs, and establishes yearly quotas for each producer. The measure has caused some controversy in the drug industry, with some members feeling that it goes entirely too far in endeavoring to control the narcotics industry.

Carbon Tet Being Shipped By Frontier Solvents Plant

Shipment of the first carload of products from its new chlorinated solvents plant at Wichita, Kans., has been made by Frontier Chemical Company, Wichita, a division of Union Chemical & Materials Corporation.

Comprising drum lots of carbon tetrachloride for a California buyer, the shipment also marked what is claimed to be the first use in the chemical industry of a steel drum marked with a calibrated measuring scale, which was devised by Frontier.

Capacity of the new plant is rated at 20 million pounds of chlorinated hydrocarbon products per year. Much of its carbon tetrachloride output will be blended with insecticides for use as a grain fumigant by farmers and elevators throughout the plains states wheat-producing area. Methylene chloride and chloroform will also be made and marketed from the new Wichita plant.

Frontier also has announced that it will establish a storage terminal for caustic soda at Grants, N. M.

Vitro Will Make Berkshire Subsidiary

Vitro Corporation of America, New York, has signed an agreement to purchase Berkshire Chemicals, Inc., New York, according to J. Carlton Ward, jr., Vitro president. Vitro will acquire all outstanding shares of the chemical sales firm in exchange for 12,667 shares of Vitro stock, effective December 1, Mr. Ward said.

Berkshire will become a wholly-owned Vitro subsidiary. Malcolm McAllister, Berkshire president, will continue in that post. No personnel changes are anticipated.

The Berkshire firm has five branch offices located in New York, Boston, Chicago, Cleveland, and Philadelphia.

The new subsidiary will continue its own business intact and, in addition, will handle sales for two Vitro divisions, Vitro Manufacturing Company, Pittsburgh, Pa., and Vitro Rare Metals, Canonsburg, Pa. The sales coverage of both firms will be increased.

Vitro Manufacturing is one of the nation's leading manufacturers of ceramics colors. Vitro Rare Metals is engaged in the refining and recovery of rare metals, metallic salts and fine chemicals for industry and the processing of uranium and other ores chiefly for the Atomic Energy Commission.

'Delrin' Acetal Resin Developed by duPont

Development of a new plastic material, "Delrin" acetal resin, which is said to have an unusual combination of mechanical properties, has been announced by the polychemicals department of E. I. duPont de Nemours & Co., Wilmington, Del.

The company said "Delrin," a product of one of its fundamental research programs, has an excellent combination of high tensile strength, toughness, high melting temperature, fatigue life, dimensional stability, solvent resistance, and resistance to deformation.

Pennsylvania Salt Will Acquire Delco

The boards of directors of Pennsylvania Salt Manufacturing Company, Philadelphia, and Delco Chemicals, Inc., Los Angeles, have approved a plan under which Pennsalt will acquire Delco, Pennsalt President William P. Drake has announced. The acquisition will be ac-

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Victor Planning Addition to Midwestern Facilities

Victor Chemical Works has negotiations in progress to acquire a large industrial site in Chicago, where it is proposed to construct an addition to the company's midwestern manufacturing facilities.

The property is located on East 138th Street and the Chicago & Eastern Illinois Railroad tracks, just within the Chicago area, the second Victor plant in that city and its eighth in the United States.

Located on the south bank of the Calumet River-Sag Canal waterway, the Victor facility will enjoy all three major forms of transportation for industrial raw materials and finished products—rail, highway, and waterway.

Final negotiations will be completed as soon as zoning approval is given by the city of Chicago. The first unit planned is a phosphoric acid plant for foods, metals, petroleum, and liquid plant foods, to supply requirements of the industries and farms of Illinois, Wisconsin, Indiana, and Michigan.

The next step contemplated is a phosphate salts plant which will give Victor additional capacity for the phosphates it supplies to the detergent and milling industries.

The plants are being designed for large tonnage production with advanced instrument controls. A similar type of plant was erected by the company a few years ago at Morrisville, Pa. It started small, but is now a major producing point for several of Victor's line of phosphate chemicals.

Concurrently, Victor also is enlarging its elemental phosphorus plant at Mount Pleasant, Tenn., where the company's eighth electric furnace, of 35,000 kilowatt capacity, is being built.

Patent, Research Overhaul Sought in Defense Department

The Department of Justice is dissatisfied with the basic patent policy of the Department of Defense. It also believes that procedures being followed in awarding research and development contracts are open to criticism and has suggested to the White House that both matters be made the subject of study and possible revision. The current policy of the Department of Defense, the largest spending agency of the federal government, is to leave in the hands of contractors all commercial rights to inventions developed through government-financed research, retaining for itself only a non-exclusive royalty-free license in the patents.

PRODUCT MANAGER: Werner L. Riegler, named product manager of the fatty acid sales department in the chemical division of Armour & Co., Chicago.

This differs from the policies being followed by other government agencies. Some—notably the Atomic Energy Commission, the Department of Agriculture and the Department of Health, Education and Welfare—often require the assignment to the agency involved of patents developed under research and development contracts.

Justice Department's Opinion

In the opinion of the Justice department, it might be well to consider whether it would not be more in the public interest, in the light of current defense problems and the increased participation of government in research activity, to apply this same rule of retention of resulting inventions and patents to the research work performed under defense contracts.

The basic reason for a change in the policy is a belief of the department that the present policy of the defense department may have a tendency to foster monopolies and reduce competition. The department said that it cannot say for a certainty that this is the case, but the limited statistical evidence at its disposal indicates that it may well be one of the major factors in this regard.

In fact, the department said in a report to the President, the effect of the whole research and development effort may well tend to increase concentration of economic power. And the manner in which research and development contracts are being awarded is a contributing cause.

Justice said that there is a tendency towards concentration of research and de-

—Continued on page 38

Paint Research Unit Is Planned by FPVPC

Federation of Paint and Varnish Production Clubs plans to establish a Paint Research Institute. According to FPVPC president Milton A. Glaser, the federation's long-range planning committee has been looking into arrangements and investigating sites for such an institute for the past three years.

Members of the committee have conferred with educators and research people in all parts of the country. They have visited and studied existing institutes in order to determine costs, facilities and other arrangements necessary for a federation institute.

Preliminary recommendations of the long-range planning committee have been approved in principle by the federation

—Continued on page 57

Acrylic Emulsion Reduced

A reduction of 2 cents a pound in the price of its acrylic emulsion, "Rhoplex B-15," has been announced by Rohm & Haas Company, Philadelphia. New prices are as follows:—Tanktruck and tankcar, 24 cents a pound; minimum truckload or carload, 26 cents; 400-pound drums, 26½ cents; lesser quantities, 36½ cents.

Petroleum Additives Prices To Be Advanced by duPont

Price increases on four additives for petroleum products have been announced by E. I. duPont de Nemours & Co., Wilmington, Del. The increases, resulting from higher manufacturing costs, will be effective January 1.

DuPont gasoline antioxidant No. 22 will be raised from $1.11 per pound to $1.21 for drum quantities, freight allowed to destination east of the Mississippi. Prices under the same conditions will be upped from 67 cents to 73 cents per pound for duPont gasoline antioxidant No. 5, from $1.75 to $1.83 per pound for duPont metal deactivator and from $1.47 to $1.54 for duPont metal deactivator No. 3.

Prices to other points and nationwide prices on carload and truckload lots will be increased by like amounts.

The Week's Price Changes

Imported Argentine Casein, Sulfonated Castor Oil Advance. Grapefruit Oil, Bourbon Vanilla, Mexican Whole Beans Decline.

Prices Advanced

Casein, imp., Arg., 1½c. per lb. (p. 56).
Cocoa butter, 3c. per lb. (p. 53).
Copra, $2.50 per ton (p. 53).
Greases, ½c. per lb. (p. 53).
Lard, 3 5c. per lb. (p. 53).
Molasses, New York, 2c. per gal. (p. 41).
Oil, castor, sulfonated, 1c. per lb. (p. 59).
Coconut, crude, ¼c. per lb. (p. 53).
Corn, crude, ½c. per lb. (p. 53).
refd., ½c. per lb.
Cottonseed, crude, ⅝c. per lb. (p. 53).
refd., ¾c. per lb.
Oiticica, 3 10c. per lb. (p. 53).
Peanut, crude, ½c. per lb. (p. 53).
refd., ½c. per lb.
Sandalwood, 10c. per lb. (p. 60).
Soybean, crude, ⅝c. per lb. (p. 53).
refd., ⅝c. per lb.
Tung, ¾c. per lb. (p. 53).
Tallow, ¼c. per lb. (p. 53).
Tin, 2¼c. per lb. (p. 36).
Salts, 8 10c. to 4c. per lb. (p. 36).
Wax, carnauba yellow, 1c. per lb. (p. 53).

Prices Reduced

Oil, grapefruit, 5c. per lb. (p. 60).
Lemongrass, 10c. per lb. (p. 60).
Vanilla beans, Bourbons, 50c. per lb. (p. 60).
Mexican whole beans, 75c. per lb.
Wax, carnauba, crude, Ceara, 1c. per lb. (p. 53).
Parnahyba, 1c. per lb. (p. 53).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER relative record of prices of chemicals a related materials is currently as follows:-

(100=1949 average)

Nov. 23, 1956	Nov. 16, 1956	Nov. 25, 1955
109.60	109.53	106.98

Allied Wins Uranium Contract

Allied Chemical & Dye Corporation, New York, is the successful bidder f the contract to produce refined uranium salts for the government. S. R. Sapiri manager of the Atomic Energy Commission's Oak Ridge Operations Office a nounced last week that Allied's proposal has been selected as the basis f negotiation of a contract. The Allied proposal, to furnish 5,000 tons U_3O_8 equivalent per year as highly purified uranium hexafluoride (UF_6) from crude uranium concentrates supplied by the AEC, provided the lowest cost to the government.

Allied will employ a new process which will permit bypassing the refining step, as presently performed in AEC plants, and obtain the necessary purification by distillation of the uranium hexafluoride. Allied has stated that its new plant will be in operation by April 1, 1959.

The production of uranium salts is presently limited to government-owned plants operated for the commission by contractors. Operation by Allied of a privately financed facility is a significant step in the commission's program to broaden industrial participation in the atomic energy program, it was pointed out.

Private participation in this phase of the atomic energy program will satisfy the need for increased capacity without expansion of government-owned facilities.

The program was originally announced on October 27, 1955, and proposals were received on October 1, 1956, the date set for their submission, from Climax Molydnenum Company, New York, and Mallinckdrodt Chemical Works, St. Louis, Mo. (joint proposal); Dow Chemical Company, Midland, Mich.; General Chemical Division of Allied Chemical & Dye Corporation, New York; Koppers Company and Kennecott Copper Corporation, Pittsburgh, Pa. (joint proposal); Twentieth Century Materials Corporation, Denver, Colo.; Union Carbide Nuclear Company, a division of Union Carbide & Carbon Corporation, New York, and Vitro Corporation of America, New York.

DEVELOPMENT MANAGER: Leonard Segl appointed manager of engineering develo ment for Food Machinery & Chemical C poration's new organic chemicals division New York.

Kaiser Aluminum Picks V.P.

Stanley B. White, manager of aluminum plant operations for Kaiser Aluminum & Chemical Corporation, Oakland, Calif., has been elected a vice president of the corporation.

B.A.-Shawinigan to Make Hexylene Glycol in Montre

B. A.-Shawinigan, Ltd., will commen production of hexylene glycol at its pla at Montreal East in March.

The chemical is derived from acetor a product now made by B. A.-Shawinig It is not now made in Canada, and t new production will be large enough supply the Canadian market, B. A.-Sha inigan said.

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GLIDDEN CHIEF ENGINEER: James W. Pollard, jr., former director of manufacturing in its chemicals-pigments-metals division, who has become chief engineer of the Glidden Company, Cleveland, Ohio.

l-Lysine Is Made In Volume by Pfizer

The first commercial fermentation production of lysine, one of the eight amino acids considered essential to human nutrition, has been announced by Chas. Pfizer & Co., Brooklyn, N. Y. The development, representing a significant breakthrough in biochemical engineering, was made possible by the fermentation technics with which Pfizer also manufactures vitamins, antibiotics, hormones and other chemicals. These new technics produce a high purity product, free of d-lysine—a form of the important nutrient which cannot be used by the body.

Pfizer's chemical sales division will market the essential amino acid in the form of l-lysine monohydrochloride. Lysine is one of eight amino acids—all "building blocks" of proteins—which cannot be synthesized by the body in amounts adequate to maintain tissue-building and good health.

The tissue building properties of l-lysine, according to Paul E. Weber, sales manager of the chemical sales division, "can potentially fulfill an important function in pharmaceutical dietary supplements designed to meet nutritional demands during all periods of life, from infancy to old age. These include pediatric, geriatric, prenatal and other formulations."

"In the United States," Mr. Weber said, "approximately one-fifth of the protein intake is obtained from cereals. But wheat and other cereal grains are naturally deficient in lysine. The addition of suffi-

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ADMA Sets Up Group To Study Gov't Research

A special committee has been set up by the American Drug Manufacturers Association to study the activities of the federal government in the field of medical and drug research. E. N. Beesley, of Eli Lilly & Co., Indianapolis, Ind., is chairman.

Other members are W. D. Malcolm, of American Cyanamid Company, New York, and Dr. E. H. Volwiler, of Abbott Laboratories, North Chicago, Ill., and president of ADMA.

The government has greatly expanded its research in the field of medicines during the past several years through the National Institutes of Health of the Public Health Service, and the National Research

—*Continued on page 67*

Plastics Codes for Buildings Win Approval of Trade Groups; Now Go to Municipal Officials

Model code regulations for the use of plastics in building construction have been approved by the major trade associations of the plastics and chemical industries. The proposals, which were jointly sponsored by the Society of the Plastics Industry and the Manufacturing Chemists' Association, will be submitted to regulatory officials in cities, counties and other jurisdictions throughout the United States and Canada as a basis of securing recognition and approval of the use of plastics in building.

This was announced last week at the semi-annual meeting and winter conference of the Manufacturing Chemists' Association, held in New York. The purposes of the code were outlined by Frederick J. Rarig, secretary of Rohm & Haas Company, and a spokesman for the drafting committees of the two industry associations.

Basis for Approval

Mr. Rarig explained that the main purpose of the model code is to spell out the basis for approval of plastics for light transmitting purposes. The principal plastics used in these applications are the polyesters, vinyls, styrenes and acrylics. Other uses of plastics in building, such as structural or interior finish and trim, generally are permitted by present codes, subject to performance standards.

The proposed code chapter has been in preparation for nearly four years and it is based in part on experience with plastics code provisions already enacted in Los Angeles and San Francisco, which were the first major cities to deal with the problem on a comprehensive basis.

Mr. Rarig warned that the chemical and plastics industries would continue to be beset with delays, lost sales and wasted efforts if a piecemeal approach to each local code authority were adopted and a specific code amendment had to be obtained approving specific plastics for specific uses in each case.

"It is of the utmost importance, Mr. Rarig told the conference, "that we recognize and accept the fact that this legislation places on the basic material manufacturer responsibility for the quality of his plastic products and responsibility for securing approval from the building official of the materials which he offers for use in the building field.

"In negotiating with building officials on your behalf, we have assured them that you will meet your responsibility. In fact, we have told them that this enabling type of legislation will work because you are responsible and resourceful people."

Amoco Development Post To Be Filled by Harrington

Dr. George A. Harrington will be general manager of development for Amoco Chemicals Corporation, to be formed before the end of the year through consolidation of three chemical affiliates of Standard Oil Company (Indiana). Howard R. Peterson will be manager of special products in the marketing department of Amoco Chemicals.

Dr. Harrington has been market research director of Indoil Chemical Company since 1953. He earlier held various research and marketing positions in the chemical field with Solvay Process Division, Magnolia Petroleum Company, Socony Mobil Oil Company, and Mallinckrodt Chemical Works.

Mr. Peterson joined Standard Oil in 1923 as a general salesman in Iowa. He became associated with the company's general office sales technical service at Chicago in 1935. In 1945 he organized Standard Oil's chemical products department, of which he was sales manager until 1949. Since 1949 he has been vice-president and manager of the sales department of Indoil Chemical Company.

UNION CARBIDE ORE V. P.: Wilder Beal, appointed vice-president of Union Carbide Ore Company, a division of Union Carbide & Carbon Corporation, New York.

Phenol Expansion Planned by Monsanto

Monsanto Chemical Company, St. Louis, Mo., has disclosed plans for a major expansion of its production capacity for phenol. Charles H. Sommer, Monsanto vice-president and general manager of the organic chemicals division, announced that the company will invest several million dollars in additional production facilities for phenol at its Monsanto, Ill., plant.

The expansion, scheduled for completion in the second half of 1958, will boost Monsanto's phenol capacity by approximately 25 percent, Mr. Sommer said.

Commonly known as carbolic acid, phenol is one of the important and versatile of the coal chemicals. Its 1955 production in the United States totaled more than one-half billion pounds. Monsanto is reportedly the second largest domestic producer.

Dixon, American Crayon Directors Vote to Merge

A merger of Joseph Dixon Crucible Company, Jersey City, N. J., and American Crayon Company, Sandusky, Ohio, has been proposed according to a joint announcement made by Frank G. Atkinson, Dixon president, and Earl L. Curtis, American Crayon president.

The proposal, which has been approved by the boards of directors of both companies, is subject to ratification by stockholders and will be presented to them as soon as details are completed. Under the terms of the proposed merger, Dixon will acquire the assets of the American Crayon Company through an exchange of capital stock.

Both companies will continue their operations without change of personnel or policy.

Election, Mideast Impact on Buying Is Still Uncertain

This report was prepared by the business survey committee of the National Association of Purchasing Agents.

It appears to be too early to determine how either the recent elections or the Middle East situation will affect the optimism of purchasing executives. There are some spotty, troubled areas and localized evidence that some of the enthusiasm which has been present is lacking. However, in general, most are anticipating good to excellent conditions for the balance of 1956 and, at least, into the first quarter of 1957.

Production continues high and the 39 percent who say it is up are the largest number so reporting in over a year. The new-order situation is substantially unchanged. Thirty-six percent say it is better and 43 percent the same as last month.

Price Trend Still Upward

Commodity prices are still on an upward trend, though less vigorously than reported in the preceding two months. Inventories are off slightly, though, apparently, not by intention. Employment is up a little, with slight drops in some industries more than offset by accelerated demands in others.

Purchasing executives continue their cautious attitude on forward commitments and the lead time on both production and MRO items is at the lowest point for many months. Higher prices and the general availability of most materials are probably the strongest contributors to the desire to buy as needed.

The special question this month asked if recent price increases have tended to rise above a reasonable relationship with wage and material cost increases. Purchasing executives pointed out that the question was difficult to answer categorically. In many instances, they believed that price increases had not been unduly large. However, there was strong feeling that, in certain industries, increases had been out of all proportion to increased costs. On an overall basis, 66 percent stated that the increases were reasonable

—*Continued on page 38*

Columbia-Southern Opens Calcium Chloride Facility

New manufacturing facilities for the production of high grade calcium chloride have gone on stream at the Columbia-Southern Chemical Corporation plant at Barberton, Ohio. The new plant, under construction since April, will provide a substantial increase in the Pittsburgh Plate Glass Company subsidiary's calcium chloride production.

In addition to regular flake and liquid solution forms of calcium chloride, the new operation will produce the first domestic high test calcium chloride in flake form, packaged in eighty-pound bags as well as in bulk, Columbia said.

Metal Hydrides Authorizes Hydrogen Unit Construction

Metal Hydrides, Inc., Beverly, Mass., has authorized Girdler Company, Louisville, Ky., to start engineering work on a hydrogen plant for its new facility at Danvers, Mass.

O'Brien Plans Addition For South Bend Plant

O'Brien Corporation will increase its nationwide paint production capacity 25 percent through a $500,000 expansion of its South Bend, Ind., headquarters plant.

The expansion will be the fifth major increase in O'Brien's nationwide paint production facilities since 1948, when it began a series of purchases of paint manufacturing companies from coast to coast. Jerome J. Crowley, jr., president, said the increase in production is needed to "equal the projected sales of O'Brien's growing number of independent dealers from coast to coast.

MCA to Honor Undergraduate Chemistry Teachers

To recognize the reward outstanding university and college teachers in the field of undergraduate chemistry, the Manufacturing Chemists' Association last week announced a national "Chemistry Teachers Award Program."

Details of the project were made public by Arthur V. Wilker of Union Carbide & Carbon Corporation, New York, a member of the association's education advisory committee and a participant in the four-man education panel at MCA's sixth semi-annual meeting in New York.

Six awards of $1,000 each will be made in 1957 to teachers who, in the opinion of a board of judges, have been personally responsible over a period of years for holding and inspiring the interest of young people in the field of chemistry.

In addition, a $500 award will be given to the institution represented by each winner, such awards to be designated for his department's use. Plans call for presentation of awards at MCA's annual meeting next June.

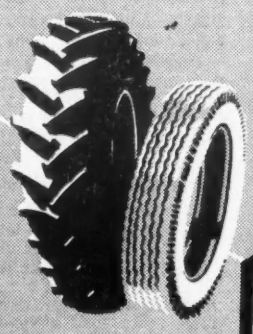
As moderator of the panel and vice-chairman of MCA's education committee, Glen Perry, of E. I. duPont de Nemours & Co., took occasion to reply to those leaders in the humanities who recently have expressed concern about the emphasis placed on technical subjects.

"We believe in teaching the humanities just as strongly as those who are concerned about its future," said Mr. Perry. "We believe in it as the essential training ground for the vast majority of our young people. We know its importance in inculcating and developing qualities of leadership.

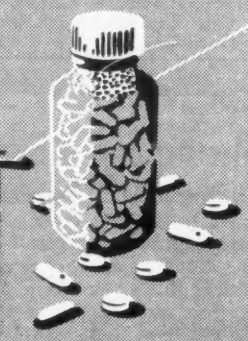
"We believe in it as essential also to those who are going to major in science and engineering. There is no real cleavage in this matter. But the facts do in-

—*Continued on page 55*

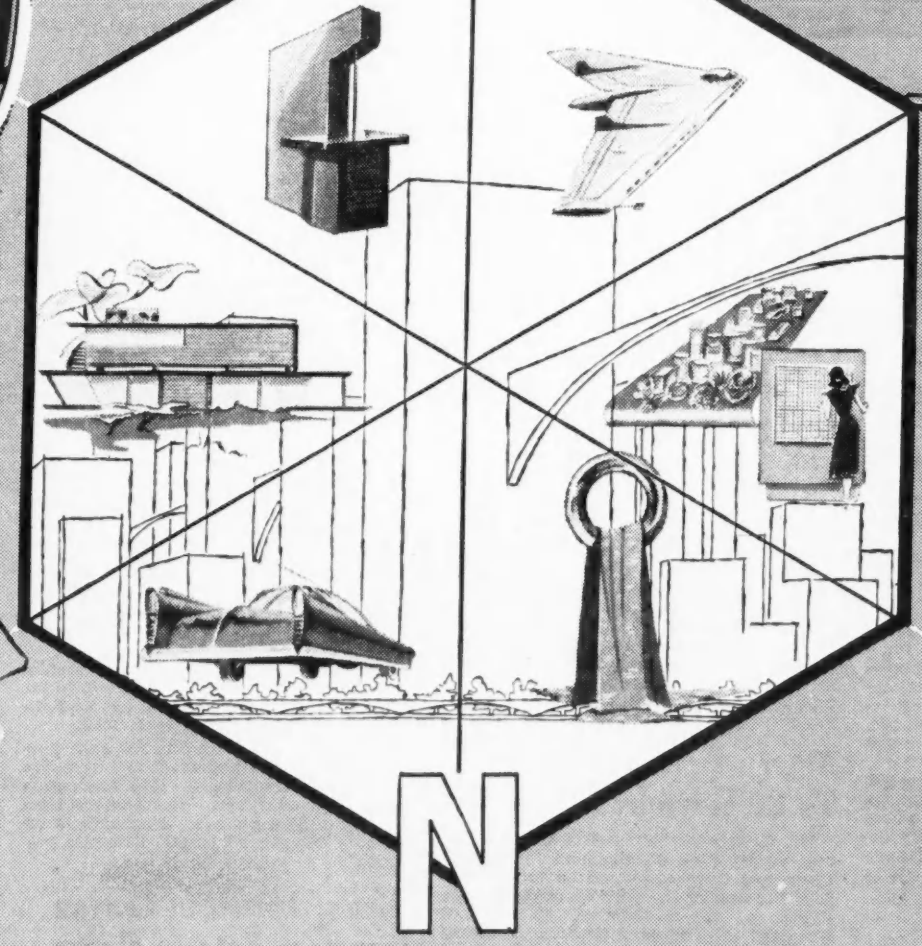
THE SHAPE OF THINGS TO COME



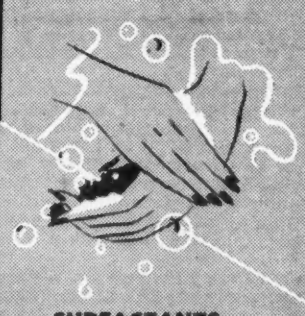
RUBBER



VITAMINS & DRUGS



FIBERS



SURFACTANTS

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Association Meetings

Chemical Bureau Alumni Association, fall get-together, Washington hotel, Washington, D. C., November 29.

Drug, Chemical and Allied Trades section, New York Board of Trade, annual fall luncheon, Waldorf-Astoria hotel, New York, November 29.

National Chemical Exposition, Public Auditorium, Cleveland, Ohio, November 27-30.

National Foreign Trade Council, annual convention, Waldorf-Astoria hotel, New York, November 26-28.

Air Pollution Control Association, semi-annual meeting, Rice hotel, Houston, Tex., December 3-5.

American Drug Manufacturers Association, annual meeting, El Mirador hotel, Palm Springs, Calif., April 22-25.

American Institute of Chemical Engineers, annual meeting, Statler hotel, Boston, December 9-12.

American Pharmaceutical Manufacturers' Association, midyear and eastern section meeting, Waldorf-Astoria hotel, New York, December 10-12; central section meeting, Edgewater Beach hotel, Chicago, February 11-13; western section meeting, Ambassador hotel, Los Angeles, February 18-19.

Association of American Soap and Glycerine Producers, annual convention, Waldorf-Astoria hotel, New York, January 23-25.

Chemical Buyers' Group, National Association of Purchasing Agents, midwinter meeting, western division, Congress hotel, Chicago, January 24; eastern meeting, Commodore hotel, New York, January 29.

Chemical Market Research Association, Sheraton hotel, Philadelphia, February 19-20.

Chemical Specialties Manufacturers Association, annual meeting, Mayflower hotel, Washington, D. C., December 3-5.

Commercial Chemical Development Association, plastics meeting, Statler hotel, New York, March 27-28; resort meeting, French Lick, Ind., May 13-14.

Federal Wholesale Druggists' Association, midyear meeting, Statler hotel, New York, March 7-9.

National Agricultural Chemicals Association, spring meeting, Fairmont hotel, San Francisco, March 6-8.

National Drug Trade Conference, annual meeting, Gramercy Park hotel, New York, December 3.

National Industrial Conference Board, fifth conference on atomic energy, Benjamin Franklin hotel, Convention Hall, Philadelphia, March 14-15.

National Plant Food Council, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-13.

Nuclear Congress, Convention Hall, Philadelphia, March 11-15.

Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Penn-Sheraton hotel, Pittsburgh, Pa., March 4-8.

Proprietary Association, scientific section, winter meeting, Waldorf-Astoria hotel, New York, December 11.

Salesmen's Association of the American Chemical Industry, Christmas party, Waldorf-Astoria hotel, New York, December 12.

Society of Plastics Engineers, annual technical conference, Sheraton-Jefferson hotel, St. Louis, Mo., January 16-18.

Society of Plastics Industry, annual conference and Pacific Coast plastics exposition, Shrine Exposition Hall, Los Angeles, March 18-21.

Synthetic Organic Chemical Manufacturers Association, annual meeting and dinner, Biltmore hotel, New York, December 3.

Toilet Goods Association, scientific section, Waldorf-Astoria hotel, New York, December 12.

Chemicals Foreign Trade of US Rises for First 3 Quarters of 1956

United States foreign trade in chemicals during the first nine months of this year has run considerably ahead of last year, with respect to exports and imports, according to preliminary estimates of the Bureau of Census. Exports for the January-September period have totaled $943.3 million as against only $801.9 million during the corresponding months last year, while imports this year were $204.7 million against $193.1 million for the first nine months of 1955.

According to the Bureau of Census, exports have topped the $100 million mark every month since March. During September, chemical exports were $105.7 million while during the same month last year they were only $91.2 million. The September estimate compares with $105.2 million in August.

Imports Slower

Imports, on the other hand, have been running behind the levels of the earlier months of this year. In September they reached only $18.6 million, which compares with $20.1 million in August and a high for the year of $27.2 million last March. During September, 1955, imports totaled $20.1 million.

The slight increase in chemical exports during September contrasted with a slight decline in exports of all merchandise during the month. Total exports were $1,518

—Continued on page 39

NWDA'S NEW PRESIDENT: Carl F. G. Meyer, 3rd, president and general manager of Meyer Brothers Drug Company, St. Louis, Mo., who has been elected president of the National Wholesale Druggists' Association.

Air Pollution Meeting Hopes to Aid Industry

A meeting to clarify the major air pollution problems facing industry, commerce and the public will be held December 13 and 14 in the Congress hotel, Chicago, under the sponsorship of the Armour Research Foundation, Midwestern Air Pollution Prevention Association and the Chicago Association of Commerce and Industry. Topics to be discussed will include civic approaches to air pollution control, dispersion patterns and zoning, regulatory effects on industry, and special problems of selected groups.

Speakers at the December 13 opening session will deal with population and in-

—Continued on page 39

Lederle Unit in Mexico Starts Tetracyline Output

A pharmaceutical manufacturing plant has been completed by Laboratorios Lederle Mexico, S.A., an American Cyanamid Company subsidiary.

Located near Mexico City, the plant covers nearly 70,000 square feet and employs some 200 Mexican nationals. Production has already started on the broad spectrum antibiotics, "Achromycin" tetracycline and "Aureomycin" chlortetracycline, in addition to other Lederle pharmaceutical products.

American Lithium Institute Is Set Up by Major Producers As a Research Organization

Establishment of the American Lithium Institute for the purpose of conducting research on lithium and its compounds, has been announced by American Potash & Chemical Corporation, Foote Mineral Company and Lithium Corporation of America. In a joint statement, the three major United States lithium producers stated that the institute has been formed to meet the growing necessity for a central organization staffed to direct research on problems of an industry-wide nature. The institute will also act as an agency for the correlation and dissemination of technical information on lithium.

The institute—a non-profit organization—will maintain offices in Princeton, N. J. A technical library and literature service will be maintained at this office.

Officers of the Institute

Marshall Sittig, formerly of Ethyl Corporation, has been elected president and managing director of the institute. Mr. Sittig is widely-known for his technical writings in the petroleum field and is an authority on the a kali metals.

Other officers of the institute are:

Vice-presidents—J. D. Campbell, Lithium Corporation; A. J. Dirksen, American Potash; and J. Fentress, Foote Mineral.

The board of directors will be comprised of the above institute officers and L. G. Bliss, Foote Mineral; Peter Colefax, American Potash; and H. W. Rogers, Lithium Corporation.

The secretary-treasurer of the institute will be M. F. McCarthy, of the firm of Oliver & Dannally.

The institute expects to support an extensive program of research and development on problems involving lithium use in the fields of chemistry, ceramics, metallurgy and nucleonics. Projects will be assigned to appropriate colleges and research institutions, but will be guided by the institute's technical policy committee, composed of representatives from the three member companies.

"We feel that the timing of the institutes' formation is particularly appropriate," Mr. Sittig said. "Within the past few years, many new uses for lithium and its compounds have been developed. The possibilities of improved light-metal alloys, of new catalysts for the booming

—Continued on page 39

Marshall Sittig

Citrus Bioflavonoids Called Valueless in Treating Colds

Citrus bioflavonoids are of no value in treating the common cold, it was reported last week in the *Journal* of the American Medical Association.

These are the findings in two independent studies involving nearly 2,000 cold sufferers. Gist of the two AMA papers is that the citrus-fruit extracts do not appreciably alleviate the symptoms of a cold.

Publication of the results drew an immediate rebuttal from Grove Laboratories, Inc., St. Louis, Mo., a major producer of citrus bioflavonoids.

James H. Grove, president of the firm, said that prior to the two latest studies ten other investigations on some 2,800 people came up with "uniformly favorable results."

He cited a clinical study based on 1,800 subjects in the current issue of the *Journal of Industrial Medicine and Surgery* which concludes that combinations of bioflavonoid and ascorbic acid "exert a mitigating and probably curative action" on colds (OPD, 11/12/56).

d-Limonene Being Offered In Tanks to Industry Users

A pure form of d-limonene, offering advantages for synthetic terpene chemicals and resins is being produced by Florida Molasses Corporation, Auburndale, Fla. This oil had previously been offered in limited supply, and is now available in tankcar quantities for industrial users.

CMRA Tells Plans For Phila. Conclave

The Chemical Market Research Association has announced plans for its meeting at the Philadelphia Sheraton hotel, Philadelphia, February 19 and 20. Theme of the meeting will be "Our Next Five Years of Competition with the Foreign Chemical Industry." Plant tours are scheduled for February 19. First facility on the agenda is the coaltar chemicals plants of the Barrett Division of Allied Chemical & Dye Corporation.

Also visited will be:—Titanium and lithium plant of Foote Mineral Company; Smith, Kline & French, Inc., and Scott Paper Company.

Theme of the morning session of February 20 will be "Foreign Chemical Producers—The Challenge for US Chemical Markets." Included on the program will be a world chemical production map, showing countries and areas outstanding in chemical production, present and future, including a peak through the iron curtain.

Also on the program will be:—"Bases and Patterns of Competition from Foreign Chemicals"; "Chemical Products

—Continued on page 48

Nitrogen Plants in India Are Pushed by Government

At least four fertilizer plants are being planned by the Government of India, to assure that targets for increased food production will be achieved, according to the Department of Commerce.

The four plants, estimated to cost between $42 million and $52.5 million, are to be located at Nangal, Neiveli, Rourkela and Bombay.

Plans for the Nangal plant are the most advanced, and the Nangal Fertilizer Company, Ltd., a semi-autonomous government agency, has been established to supervise the plant's construction at Nangal, west of Simla.

This factory is expected to produce ammonium nitrate diluted with limestone

—Continued on page 67

Germany Far Ahead of US on Fertilization of Forests

The practice of fertilizing forests to increase wood production is considerably more advanced in West Germany than in the United States, according to Dr. E. D. Crittenden, director of research for the Nitrogen Division of Allied Chemical & Dye Corporation, New York.

Dr. Crittenden bases his observations on a newly-translated report on German forest fertilization results released to the public last week.

He points out that German foresters have, by using fertilizer, increased nursery yields from 100 to 400 percent and yields of forest trees by 150 to 250 percent. The report indicates that they have also applied their research findings in practical forestry on a more intensive scale than is known in the United States.

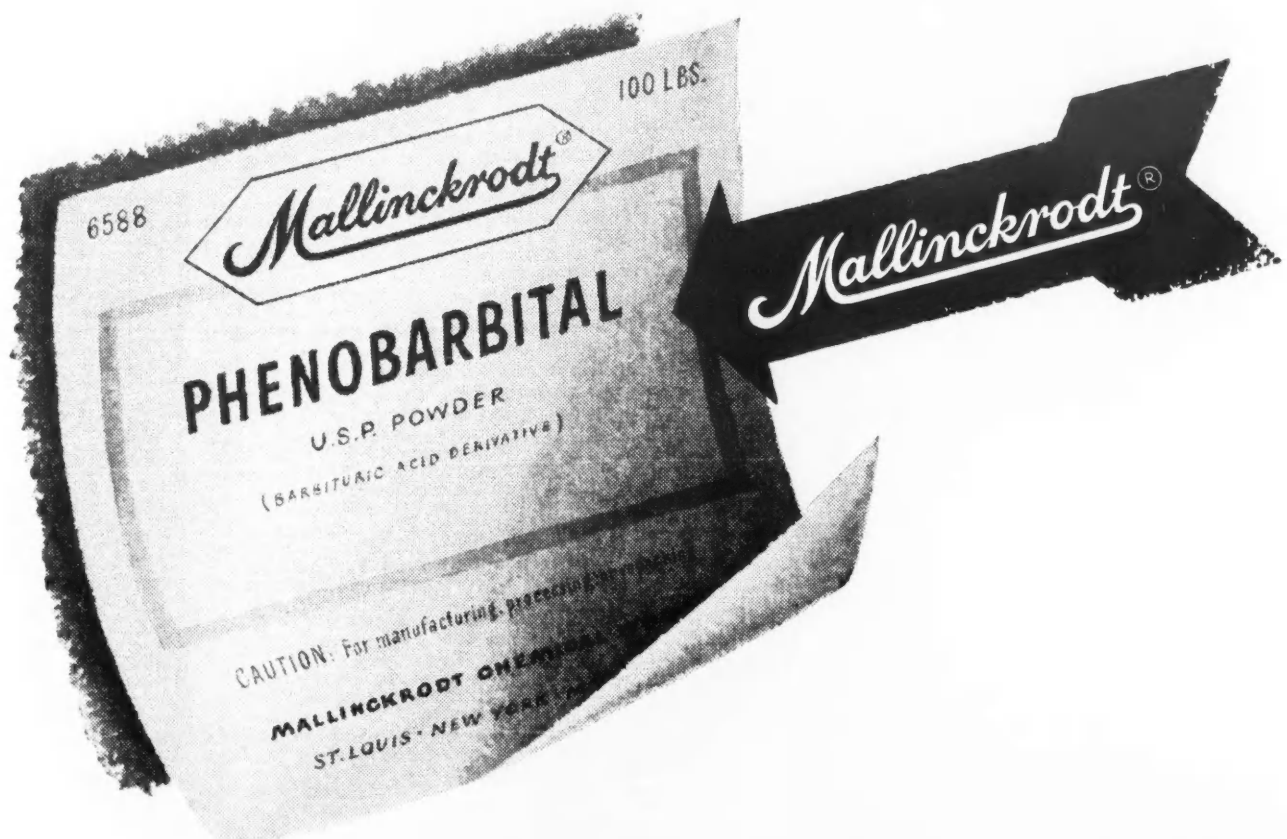
"This intensive German work," Dr. Crittenden says, "has been sparked by a much tighter wood supply situation over there than we have experienced. In a period of less than ten years, German wood imports have increased thirteen-fold.

The comprehensive report was published abroad by the German firm of Ruhr-Stickstoff, Bochum, and translated and published here by Allied Chemical.

The book is aimed at serving as an aid to the practical forester, with the idea of enabling forestry to start catching up with the great head start agriculture has in the field of fertilization. In the United

—Continued on page 38

CHEMICALS YOU USE WITH CONFIDENCE



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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, November 23 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Acacia (see Gum arabic).
Acenaphthene below 92.5 C., m.p., dms., works lb. .40 - —
above 92.5 C., m.p., bbls., dms., lb. .41 - .50
Acetaldehyde 99% dms., c.l., dlvd. lb. .12 - —
l.c.l., dlvd lb. .13½ -
tanks, dlvd lb. .10 - —
Acetaldol (see Aldol).
Acetanilide tech. flaked, bbls., bgs., c.l., frt. alld lb. .30½ - —
ton lots lb. .31½ - —
smaller lots lb. .34½ - —
USP, bbls., 2,000-lb. lots lb. .79 - —
smaller lots lb. .80 - .81
Acetic anhydride dms., c.l. dlvd E. lb. .16½ - —
l.c.l., dlvd. E lb. .17 - —
tanks dlvd E lb. .14 - —
Acetoacetanilide, fib dms., c.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide fib dms., c.l., dlvd 1.35 - —
l.c.l., dlvd lb 1.36 - —
Acetoacet-o-toluidide, fib dms., c.l., dlvd. lb. .82 - —
l.c.l., dlvd lb. .83 - —
Acetone, CP dms., c.l., dlvd... lb. .10½ - —
l.c.l. dlvd lb. .11½ - —
tanks, dlvd lb. .08 - —
Methyl (see M)
Acetonitrile, dms., c.l., works... lb. .45 - —
l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt equald lb. 1.17 - 1.19
Acetophenone, cns., dms lb. 1.21 - 1.85
tech., dms., l.c.l., works lb. .75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85
Acetyltributyl citrate, tech., non-ret. dms., c.l. frt alld. E of Denver lb. .36 - —
l.c.l. frt alld E of Denver lb. .35 - —
tanks frt alld E of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret dms., c.l., frt. alld, E. of Denver lb. .39 - —
l.c.l. frt alld E of Denver, lb. .40 - —
tanks frt alld E of Denver, lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt alld lb. .60 - —
Acid, abietic, coml., dms., c.l., works lb. .12 - —
l.c.l., ex whse lb. .1400- —
cryst., dms. c.l., works lb. .06½ - —
l.c.l., works lb. .07 - .07½
Acetic coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56% bbls 100 lbs 8.25 - —
70% bbls 100 lbs. 9.95 - —
80% bbls 100 lbs 10.45 - —
glacial syn. CP dms., dlvd. 00 lbs.22.00 -23.00
tech. dms. c.l., dlvd 100 lbs.13.75 - —
l.c.l., dlvd. .... 100 lbs.14.25 - —
tanks, dlvd 100 lbs.10.00 - —
USP chys., inclusive dlvd., 100 lbs.31.00 -32.00
Acetic anhydride (see Acetic anhydride above).
Acetylsalicylic, USP, special, makers, primary distrib., bbls., 1,000-lb lots, point of shipt lb. .61 - —
standard, fine, cryst., gran., (30-40 mesh) powd., (60 mesh) bbls. 1,000-lb lots. lb .56 - .58
Freight equald, shipt identical quantity over standard routes, from N. Y., Phila. Midland, Mich. Chicago and St Louis
Adipic, bgs., c.l. dlvd lb. .32 - —
l.c.l., dlvd lb. .34¼ - —
Aminoacetic NF bbls., frt. adjusted lb 1.50 - 1.75
p-Aminobenzoic, tech. dry, dms., works lb 1.74 - 1.77
USP dms. 1,000-lb lots or more, works lb. 2.60 - —
smaller lots, works lb. 2.65 - 2.75
p-Aminosalicylic dms. 100 lbs or more, frt adjusted lb 3.70 - —
Anthranilic 99%, 150-lb. dms., dlvd lb. 1.15 - —
Arsenous, tech (see Arsenic, white).
USP (see Arsenic trioxide)
Ascorbic USP dms. 25-100 kilo lots kilo.12.00 - —
10-kilo lots kilo.12.35 - —
5-kilo lots kilo.12.75 - —
bots 1-kilo lots kilo.13.00 - —
500-gram lots kilo.13.50 - —
Battery, chys. c.l., works, E 100 lbs 2.35 - —
l.c.l. works, E 100 lbs 2.65 - 3.45

Acacia—Acid, Itaconic

Acid, benzoic, tech., bbls., dms., 100 lb lots or more lb. 44 - —
USP, bbls, dms. 100-lb lots or more lb. .54 - —
Betahydroxynaphthoic (see Acid, b-Oxynaphthoic)
Betaoxynaphthoic (see Acid b-Oxynaphthoic)
Boric, tech., 99.9%, cryst., bgs., c.l., works ton.126.75 - —
ton lots, ex whse, N. Y. or Chi ton.178.50 - —
smaller lots, same basis. ton.183.50 - —
dms., c.l., works ton.151.25 -172.25
ton lots, ex whse, N. Y. or Chi ton.203.00 -223.00
smaller lots, same basis. ton.208.00 -228.00
gran., bgs., c.l., works ton.101.75 - —
ton lots, ex whse, N. Y. or Chi ton.153.50 - —
smaller lots, same basis. ton.158.50 - —
dms., c.l., works ton.126.25 -147.25
ton lots, ex whse, N. Y. or Chi ton.178.00 -198.00
smaller lots, same basis. ton.183.00 -203.00
bulk, c.l., works ton.95.75 - —
Acid, boric, tech., 99.9% powd., bgs., c.l., works ton.106.75 - —
ton lots, ex whse, N. Y. or Chi ton.138.50 - —
smaller lots, same basis. ton.163.50 - —
dms., c.l., works ton.131.25 -152.25
ton lots, ex whse, N. Y. or Chi ton.183.00 -203.00
smaller lots, same basis. ton.188.00 -212.00
USP boric acid $25 per ton high-
Broenners bbls lb 1.76 —
Butyric, 99% dms., c.l., works lb .34 - —
l.c.l. works lb 34½ - —
tanks, works lb 32½ - —
Capric, dms lb .25 .27
Caprylic, dms lb .25 .27
Cassella dms. frt alld., 100% basis lo 1.44 1.75
Castor oil, dms lb. .17¾ - .19¾
Chicago paste bbls frt alld lb 3.21 —
Chloroacetic mono purif., flake, 99% dms lb .23½ .25½
tech. flake 96-97% dms, frt equald lb .20 .21
o-Chlorobenzoic fib dms., t.l. works lb 1.10 - —
smaller lots, works lb. 1.25 - —
Acid, p-chlorobenzoic, fib dms., 2,000 lbs or more, works lb 2.25 - —
less than 2,000 lbs. same basis. lb. 2.30 - —
Chlorosulfonic, dms., c.l., frt. equald lb. .0465- —
l.c.l., frt. equald lb. .0515- —
tanks, frt equald lb. .0415- —
Acid, chlorosulfonic, in stainless steel dms. ½c per lb higher
Chromic, 99¾%, dms., c.l., works, frt. equald lb. .29½ - —
l.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31
NF (see Chromium trioxide).
Cinnamic refd., bots lb 2.50 3.50
Citric, USP anhyd gran., fine gran., bgs., dms., c.l. lb. 10,000-lb lots 1 shipt. lb. .29½ .30
lb. .30 .30¼
smaller lots lb. .30½ - .31
hydrous, gran., fine gran., bgs., dms., c.l lb. 10,000-lb lots 1 shipt. lb. .27½ .28
lb. 28 .28¼
smaller lots lb. 29 .29¼
Powdered citric acid ½c higher
Cleve's, mixed, bbls lb. 1.05 - —
Coconut oil, dist. dms lb. 25 .27
tanks lb 23 - —
dbl dist. dms lb. 25 .27
tanks lb .23 .24
Corn oil dist. dms lb. .16¾ .18¾
tanks lb. .14¾ - —
Cottonseed oil dist. dms lb. .15¾ - .17¾
tanks lb. .13¾ - —
2,3-Cresotic, dms., ton lots works lb. 70 - —
less than ton lots works lb. 72 - —
Cresylic, oaltar dom., resin and triecresyl phosphate grade, 50°c, 207° or above, tanks, frt. equald gal. 1.10 - —
204° to 207° C., tanks, frt equald gal. 1.20 - —
non-resin grade, 50°c, 210° or above, total range over 9° C., dms., c.l., frt. equald gal. 1.13 - —
l.c.l., frt equald gal. 1.19 - 1.20
tanks, frt. equald gal. 1.00 - —
imp. 75°c at 215° C. or over, dms ex whse gal. .95 - —
petroleum, dom., 195° to 214°C., non-ret. dms., 65 to c.l., works, San Francisco and Los Angeles gal. .80 - —
l.c.l. same basis gal. .82 .84
tanks, same basis gal. .65 - —
200° C. to 222° C., tanks, Wilmington, Cal lb. .65 .72
211° C. to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. .76 - —
c.l., same basis gal. .74 - .80
tanks, same basis gal. .61 - —
220° C. to 242° C., tanks, Wilmington, Cal lb. .62 .67
245° C. to 295° C., tanks, Wilmington, Cal gal. .50 - —
Crotonic fib dms., 200 lbs. or more, works lo. .50 - —
Cyanoacetic, tech. bbls lb .80 1.25
Dichlorophenoxyacetic (see 2,4-D).
Diethylbarbituric (see Barbital).
Diglycolic bgs. works lb. .14 - —
Dithiodibenzoic dms. 1,000-lb lots, works lb 1.45 - —
2-Ethyl hexoic, dms., c.l., dlvd. lb. .37 - —
l.c.l. dlvd lb. .38 - —
tanks dlvd lb .34½ - —
F, crude, paste, bbls., works lb. 2.10 - —
Folic, bots., fib. cns., kilo lots or more, gram. 1.40 - —
Formic, 85%, chys., c.l., works lb. .1570- —
l.c.l., works lb. .1620- .1720
90%, chys., c.l., works lb. .1625- —
l.c.l., works lb. .1675- .1775
Fumaric tech. bgs. dms., c.l., frt alld E lb. .25½ - —
l.c.l., same basis lb. .26½ - —
Gallic, NF VII, bbls 1,000 lb lots lb 1.80 —
smaller lots lb 1.82 2.00
tech. bbls., 1,000-lb lots lb 1.58 —
smaller lots lb 1.82 2.00
Gamma dry grd. bbls frt alld lb 1.50 —
paste bbls frt allo lb 1.45 —
Glucenic, tech. 50% bots lb .23 .35
chys lb 19 —
dms lb 15½ —
l-Glutamic, 99½% fib dms., 100-lb lots, frt. alld lb. 2.00 - —
25-lb. lots, frt. alld lb. 2.05 - —
Glycolic (see Acid hydroxyacetic).
H, dry bbls., c.l. works, 100% basis lb 1.00 - —
l.c.l. same basis lb 1.02 - —
Hydriodic, 1.56 s.g., chys lb 2.94 - —
1.70 s.g., chys lb 3.23 - —
Hydrobromic, medicinal, 48%, chys., dlvd E lb. .37 .43
Hydrochloric, anhyd (see Hydrogen chloride).
18° chys c.l., works 100 lbs. 2.50 —
l.c.l. dlvd., Metropolitan area 100 lbs. 2.90 3.05
tanks works, frt equald ton.28.00 - —
20° chys. c.l., works 100 lbs. 2.75 - —
l.c.l., dlvd., Metropolitan area 100 lbs. 3.13 - —
tanks, works, frt. equald ton.30.00 - —
22°, chys., c.l., works 100 lbs. 3.25 - —
l.c.l., dlvd., Metropolitan area 100 lbs. 3.63 - —
tanks, works, frt. equald ton.35.00 - —
CP, USP consumers, chys., extra, c.l., works lb. .13¾ - —
l.c.l., same basis lb. .17¼ - .17¾
5-pint bots, extra, cs., c.l., same basis lb .20¾ - —
l.c.l., same basis lb. .22¼ - .23¼
Acid, hydrochloric, CP, USP, prices to dealers 1½c per lb less.
Hydrocyanic, cyls. c.l. dlvd lb. .70 - —
l.c.l., same basis lb. .75 - .90
dilute NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric, anhyd. (see Hydrogen fluoride).
aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd 100 lbs.19.25 - —
l.c.l., l.t.l., dlvd 100 lbs.20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 - —
l.c.l., l.t.l., dlvd 100 lbs.22.50 - —
tanks, works, frt. equald. 100 lbs.15.50 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming. In those states add $2.70 per cwt. for drum delivery.
Hydrofluosilicic, dms. works, 30% basis lb. .06 —
Hydroxyacetic, tech., 70% non-ret. bbls., Phila., 100% basis lb. .136 - —
tanks Belle W Va., 100% basis lb .095 —
Hypophosphorus, purif., 50%, cbys lb 1.30 1.32
USP, cbys lb .88 —
Isonicotinic, 100-lb fib dms., works lb. 4.25 —
Hydrazide (see Isoniazid).
Itaconic, tech., fib. dms., c.l., works lb .43 - —
l.c.l., works lb. .44 - —
purif., fib. dms., c.l., works lb .53 - —
l.c.l., works lb. .54 - —

Abbreviations

Used in OPD Market Quotations

alld	allowed	distr.	distributor	NNR	New and Nonofficial Remedies
amorph.	amorphous	djns.	demijohns		
AMP	American melting point	dlvd.	delivered	No.	number
		dms.	drums	nom	nominal
anhyd.	anhydrous	dom.	domestic	o-	ortho
a.p.a.	available phosphoric acid	E	east	ord	ordinary
		e.p.	end point	oz	ounce
approx.	approximately	equald.	equalized	p-	para
artif.	artificial	exp.	expressed	Pac	Pacific
ASTM	American Society for Testing Materials	F	fahrenheit	pf	proof
		ferment.	fermentation	phos.	phosphate
		f.f.a.	free fatty acid	photo.	photographic
Atl.	Atlantic	f.f.c.	free from chlorine	pkgs.	packages
Be.	Baume			powd.	powdered
bbls.	barrels	fib.	fiber	precip	precipitated
bgs.	bags	f.o.b.	free on board	prod.	producer
bls	bales	f.p.a.	free of prussic acid	pt	point
bots.	bottles			pulv.	pulverized
b.p.	boiling point	frt.	freight	purif.	purified
b.p.l.	bone phosphate of lime	gal.	gallon	redist.	redistilled
		gran.	granular	refd.	refined
b.r.	boiling range	grd.	ground	refy.	refinery
bxs.	boxes	I.&a.	iron and aluminum	reg.	regular
C.	centigrade			resub.	resublimed
cbys.	carboys	i.b.p.	initial boiling point	ret.	returnable
CD	completely denatured			SD	specially denatured
		imp.	imported		
c.i.f.	cost, insurance, freight	incl.	included	s.d.	single distilled
		indust.	industrial	S. E.	southeast
cks.	casks	kgs.	kegs	sec.	secondary
c.l.	carlots	l-	laevo	secs.	seconds
cns.	cans	lacq.	lacquer	s.g.	specific gravity
coml.	commercial	lb.	pound	ship't	shipment
conc.	concentrated	l.c.l.	less than carlots	soln.	solution
CP	chemically pure	l.t.l.	less truckload	s.u.	standard unit
		liq.	liquid	syn.	synthetic
cps.	centipoises			tanks.	railroad tankcars
cryst.	crystal	mfrs.	manufacturers	tech.	technical
cs.	cases	m-	meta	tert-	tertiary
ctns.	cartons	m.a.p.	mixed aniline point	t.l.	truck loads
cyls.	cylinders			t.w.	tank wagons
		min.	minimum	USP	U. S. Pharmacopoeia
d-	dextro	m.p.	melting point		
dbl.	double	N-	nitrogen	vis.	viscosity
denat.	denatured	n-	normal	VM&P	varnish makers & painters
dest-dist.	destructive-distilled	nat.	natural		
		neut.	neutral	W	west
dl-	dextro-laevo	NF	National Formulary	whse.	warehouse
dist.	distilled			w. w	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

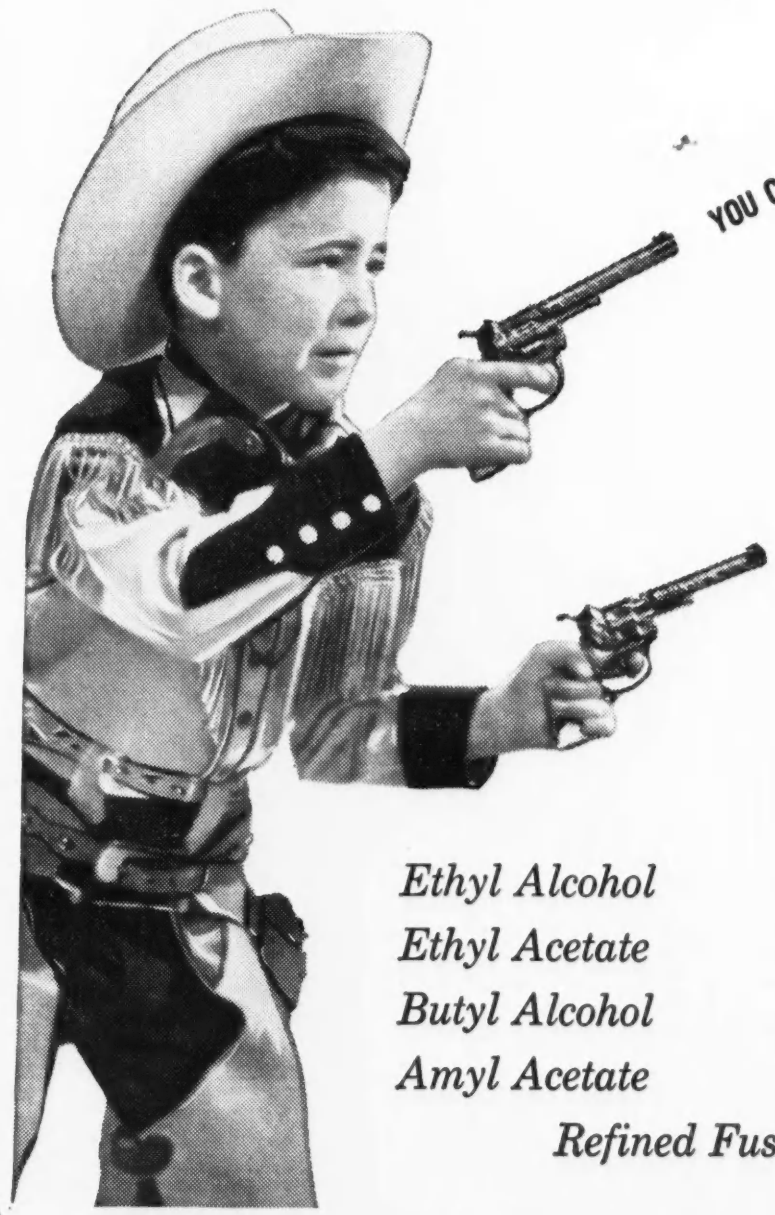
Acid, J, paste, bbls., works, 100% basis lb. 2.45 - —
powd., bbls., same basis lb 2.50 2.85
Koch, bbls., frt. alld. 100% basis. lb. 1.00 - —
L, bbls. works lb. 1.25 - —
Lactic, edible, 50%, bbls., 20 or more lb. .1621- .215
smaller lots lb. .1921- .225
80%, bbls., 5 or more lb. .3121- .37
smaller lots lb. .3171- .375
plastic grade 50%, bbls., 20 or more works lb. .23 — —
1 to 19 lb. .235 - —
80%, bbls., 5 or more lb. .385 - —
tech. 22% bbls. c.l., works 100 lbs 6.30 - —
l.c.l., works 100 lbs 6.70 - —
cbys., l.c.l., works 100 lbs 12.20 - —
44%, bbls., c.l., works 100 lbs 11.45 -11.95
l.c.l., works 100 lbs 11.85 -12.35
USP, 85% cbys. lb. .85 .88
Laurent's, bbls lb. .60 — —
Lauric, 90%, dms lb. .36½- .38½
Linseed oil, dist., dms lb. .20 - —
w.w., dms lb. .2300- —
Maleic, cryst. powd. dms lb. .37 .38
Malic, tech., dms lb. .50 - —
Mandelic NF dms. 1,000-lb lots, lb 2.35 - —
smaller lots lb 2.40 2.50
Metanilic, dms., works lb. .57 .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .47 - —
smaller lots, works lb. .47½- .50
tanks, works lb. .45 - —

Acid, molybdic, 85%, dms, works lb. 1.20 - —
Monochloroacetic, purif. (see Acid, Chloroacetic mono-).
Muriatic (see Acid, hydrochloric).
Myristic, dms lb. .26 - .28
1-naphthol-4 sulfonic (see Acid, Neville and Winthers)
1-Naphthol-5-sulfonic (see Acid, L).
1-Naphthol-5-sulfonic 8-amino (see Acid, S).
1-Naphthol-3,6-disulfonic 8-amino (see Acid, H).
2-Naphthol-6,8-disulfonic (see Acid, Gamma).
5-Naphthol-7-sulfonic 2-amino (see Acid, J).
Naphthol sulfonic mixed (see Acid, Cleve's).
1-Naphthylamine-5-sulfonic (see Acid, Laurent's).
2,Naphthylamine-4,8-disulfonic (see Acid, Cassella).
2-Naphthylamine-6-sulfonic (see Acid, Broenner's).
2-Naphthylamine-7-sulfonic (see Acid, F).
2-Naphthylamine-1-sulfonic (see Acid Tobias).
Nevile and Winther's, dms., frt. alld lb. 1.30 - —
Nicotinic, USP, dms., dlvd kilo 8.00 - 8.30
Amide, USP (see Nicotinamide).
Nitric, 36° Be, cbys., c.l., works, E 100 lbs. 5.75 - —
l.c.l., works, E 100 lbs. 6.05 - 6.85
38° Be, cbys., c.l., works, E. 100 lbs. 6.25 - —
l.c.l., works, E 100 lbs. 6.55 - 7.35
40° Be, cbys., c.l., works, E. 100 lbs. 6.75 - —
l.c.l., works, E 100 lbs. 7.05 - 7.85

Acid, nitric, 42° Be, cbys., c.l., works, E. 100 lbs. 7.25 - —
l.c.l., works, E 100 lbs. 7.55 - 8.35
88.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
l.c.l., same basis lb. .20 - .20½
8 pt. bots extra, cs., c.l., same basis lb. .22½- —
l.c.l., same basis lb. .24 - .25
p-Nitrobenzoic, dms., c.l., works. lb. .72 - —
l.c.l., works lb. .73 - —
Oleic, s.d., dms lb. .18½- .20½
tanks lb. .16½- —
dbl. dist. (white) dms. lb. .20½- .22½
tanks lb. .18½- —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Creosotic).
Oxalic, bbls., c.l., works lb. .16½- —
10,000-lb. lots, works lb. .16¾- —
smaller lots, works lb. .17¾- —
b-Oxynaphthoic, fib dms. 250 lbs. or more, frt. alld lb. 1.14 - 1.17
Palm. dist., dms lb. .14¾- .16¾
tanks lb. .12¾- —
Para aminobenzoic (see Acid, p-Aminobenzoic).
Para aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid p-Chlorobenzoic).
Paramethylphenylcinchonic (see Neocinchophen).
Paranitrobenzoic (see Acid p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid p-toluidine-m-sulfonic).
Peri, dry, frt. alld. lb. 1.35 - —
paste, frt. alld. lb. 1.30 - —
Phenylacetic, pure, cryst., cns. lb. 1.45 - 1.75

Acid, phenylcinchoninic (see Cinchophen).
Phenylglycolic (see mandelic).
Phosphoric, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 6.75 - —
l.c.l., same basis 100 lbs. 7.00 - 7.50
tanks, works 100 lbs. 5.35 - —
80%, cbys., c.l., frt. alld. 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 7.85 9.10
tanks, works 100 lbs. 5.75 - —
NF, 85%, cbys., c.l., works lb. .0825- —
l.c.l., works lb. .0850- .0975
tanks works lb .0640- —
Picric, NF, bbls lb. .85 - —
tech., bbls lb. .44 - —
Propionic, syn., pure, dms., c.l., frt. alld lb. .22¾- —
l.c.l., frt. alld lb. .23¾- —
tanks, frt. alld lb .20¾- —
Pyrogallic, NF (see Pyrogallol)
tech., bbls lb 2.76 2.99
Ricinoleic (see Acid, castor oil, split).
S., bbls., works lb. 3.25 - —
Salicylic, crude fib. dms. c.l., frt. alld lb. .35 - —
l.c.l., frt. alld. 100 lbs. or more lb. .36 - —
sublimed, tech., fib. dms., c.l., dlvd lb. .37 - —
l.c.l., dlvd. lb. .41 - —
USP, cryst., fib. dms lb. .48 - —
powd., fib. dms lb. .55 - —
Sebacic, purif., dms., c.l., works lb. .64 - —
l.c.l., works lb. .66 - .70
Soybean oil, dbl. dist., dms lb. .18¾- .20¾
tanks lb. .16¼- —
s.d., dms lb. .17¼- .19¼
tanks lb. .15¼- —
Stearic, dbl pressed, bgs lb. .15¼- .17¼
single pressed, bgs lb. .14¾- .16¾
triple pressed, bgs lb. .17½- .19½
Succinic, purif., cryst., bbls., works lb. .62 .75
Sulfanilic, tech., dms. c.l., frt. alld lb. .21 - —
l.c.l., frt. alld lb. .23 - —
Sulfuric 60° Be, cbys., c.l., works 100 lbs 2.00 - —
l.c.l., works 100 lbs 2.45 - —
tanks, works ton 18.60 - —
66° Be, cbys., c.l., works. 100 lbs. 2.25 - —
l.c.l., works 100 lbs. 2.55 -3.35
tanks, works ton 22.35 - —
98%, tanks, works ton 23.50 - —
99-100%, tanks, works ton 23.95 - —
CP, NF, consumers, frt. equald. lb. .12¾- —
l.c.l., same basis lb. .14¼- .14¾
5-pt. bots., extra cs., c.l., works, frt. alld lb. .16¼- —
l.c.l., same basis lb. .18¼- .18¾
fuming toleum), 20% tanks, works ton 25.00 - —
40%, tanks, works ton 29.00 - —
65%, tanks, works ton 39.50 - —
Tall oil, dms., c.l., works lb. .09 - .09½
tanks, works lb. .07½- .08
Tallow dist., dms lb. .15¼- .17¼
tanks lb. .13¼- —
hydrogenated, dms lb. .14¼- .16¼
Tannic, NF fluffy bbls., 1,000-lb. lots lb. 2.05 - —
smaller lots lb. 2.06 - 2.10
powd., bbls., 1,000-lb. lots lb. 1.9. - —
smaller lots lb. 1.96 - 2.01
tech., dms lb. 1.05 - —
Tartaric, USP, dom., 230 or 250-lb. dms., c.l lb. .49 - —
10,000-lb. lots, 1 shipt lb. .49½- —
smaller lots lb. .50 - —
100-lb. dms lb. .51 - —
imported, bgs lb. .42 - .45
Thioglycolic, refd., cbys., 100% basis lb. 1.35 1.55
Thiosalicylic, purif., dms., 1,000-lb. lots, works lb. 4.00 - —
Tobias, bbls., frt. alld lb. .81 - —
p-Toluenesulfonic, dms., c.l., t.l., works lb. .17 - —
l.c.l., works lb. .18 - —
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l lb. .90 - —
125 lbs to t.l lb. 1.00 - —
o-Toluidine-m-Sulfonic, frt. alld. lb. .70 - —
p-Toluidine m-sulfonic, bbls., works lb .92 1.04
Trichloroacetic, bots. lb. 2.00 - 2.50
Trichlorophenoxyacetic (see 2,4,5-T).
Tungstic, tech., dms., 1,000-lb. lots, works lb. 3.00 - —
smaller lots, works lb. 3.15 - 3.50
Undecylenic, dms lb 1.40 - —
Aconite root, bls lb. .50 .55
Acrolein, tech., dms., c.l., works lb. .47 - —
l.c.l., works lb. .47½- —
tanks works lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .31 - —
l.c.l., l.t.l., frt. equald lb. .32 - —
tanks, frt. equald lb. .28 - —
ACTH, cryst. bulk 1,000 units/gram. bots gram 15.00 - —
Adeps lanae (see Lanolin)
Adrenocorticotropic hormone (see ACTH).
Agar, USP Kobe No. 1, strip, bls lb 2.25 - —
powdered 30 mesh, fib., dms lb 2.75 - —
dl-Alanine dms. works lb 8.50 -11.00
Albumin, blood, dark (see Blood dried, soluble).
light, dms lb. .65 1.00
Egg, edible, cryst., powd., bbls lb. 1.74 - 1.76
flake lb. 1.70 - 1.72
tech., cryst., bbls lb 1.08 - 1.10
Alcohol, allyl, dms., c.l. dlvd lb. .32 - —
l.c.l., dlvd lb. .33 - —
tanks, dlvd lb. .30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°-132°C., dms. l.c.l., dlvd lb. .43 - —
ACS grade, dms., l.c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .18½- —
l.c.l., frt. alld lb. .19½- —
tanks, frt. alld lb. .16 - —
primary, dms., c.l., frt. alld. lb. .19¾- —
l.c.l., frt. alld lb. .20¾- —
tanks, frt. alld lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
l.c.l., works lb. .20 - —
tanks, works lb. .17 - —
tert-synthetic, dms., c.l., frt. alld, E lb. .18½- —
l.c.l., frt. alld E lb. .19½- —
tanks, frt. alld E lb. .16 - —
1-pentanol, (syn normal), dms., c.l., works lb. .41½- —
l.c.l., works lb. .42½- —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Benzyl, NF, dms lb. .64 .79
tech., dms., dlvd lb. .47½- .49
n-Butyl, ferment., dms., c.l., frt. alld lb. .16½- —
l.c.l., frt. alld lb. .17½- —
tanks, frt. alld lb. .14 - —
synthetic, dms., c.l., dlvd lb. .16½- —
l.c.l., dlvd lb. .17½- —
tanks, dlvd lb. .14 - —
sec-synthetic, dms., c.l., dlvd. lb. .14½- —
l.c.l., dlvd lb. .15½- —

sure as sh◎tin'



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Alcohol, n-butyl, sec-synthetic, tanks, dlvd ... lb. .12 - —
tert-synthetic dms., c.l., frt. alld. lb. .14 - —
l.c.l., frt. alld ... lb. .15 - —
tanks, frt. alld. ... lb. .12 - —
Caprylˌ 95%, dms., c.l., works lb. .21¼- —
l.c.l., works ... lb. .22½- .23½
tanks, works ... lb .19½- —
Cetyl, extra, fib. cns., 500-lb. lots or more lb. .65 - .72
NF, fib. cns., 140-lb. lots or more lb. .48 - —
Cinnamic, bots ... lb. 2.15 - 2.75
Decyl mixed isomers, dms., c.l., dlvd. lb. .23½- —
l.c.l., dlvd ... lb. .24½- —
tanks, dlvd ... lb. .21 - —
perfume grade, bots ... lb. 1.75 - 2.00
normal (see 1-Decanol)
Denat. CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E of Rockies gal. .64½- .66
l.c.l., same basis gal. .69½ .77
tanks, dlvd. same basis, gal. .48½ .50

Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.

Proprietary solvent, dms., c.l., dlvd. E of Rockies gal. .66 - —
l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.

SD1, dms., dlvd. E. of Rockies, gal. .66 - —
l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —
SD2B, dms., c.l. dlvd. E of Rockies gal. .64 - —
l.c.l., same basis gal. .69 - .75
tanks, same basis gal. .48 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .635 - —
l.c.l., same basis gal. .685 - .745
tanks, same basis gal. .475 - —
SD23A, dms., c.l. dlvd. E of Rockies gal. .655 - —
l.c.l., same basis gal. .705 - .765
tanks, same basis gal. .495 - —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .66 - —
l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —
SD29, dms., c.l., dlvd. E. of Rockies gal. .645 - —
l.c.l., same basis gal. .695 - .755
tanks, same basis gal. .485 - —
SD30, dms., c.l., dlvd. E. of Rockies gal. .63 - —
l.c.l., same basis gal. .68 - .74
tanks, same basis gal. .47 - —
SD35A, dms., c.l. dlvd. E of Rockies gal. .665 - —
l.c.l. same basis gal. .715 - .775
tanks, same basis gal. .505 - —
SD40, dms., c.l., dlvd. E. of Rockies gal. .645 - —
l.c.l., same basis gal. .695 - .755
tanks, same basis gal. .485 - —

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.

Diacetone, acetone-free, dms., c.l., dlvd. lb. .15 - —
l.c.l., dlvd ... lb. .16 - —
tanks, dlvd ... lb. .125 - —
tech., dms., c.l., dlvd ... lb. .145 - —
l.c.l., dlvd ... lb. 1.55 - —
tanks, dlvd ... lb. .12 - —
Ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies gal. 20.58 - —
c.l., same basis gal. 20.63 -20.69
tanks, same basis gal. 20.42 - —
tax free, dms., c.l., dlvd. E. of Rockies gal. .63 - —
l.c.l. same basis gal. 68 - .74
tanks, same basis gal. .47 - —
absolute, 200 pf. tax paid, dms., dlvd. E of Rockies gal. 21.68 - —
l.c.l., same basis gal. 21.73 -21.79
tanks, same basis gal. 21.52 - —
2-Ethylbutyl, dms., c.l., works lb. .30 - —
l.c.l., works ... lb. .30¾- —
tanks, works ... lb. .28 - —
2-Ethylhexyl, dms., c.l., dlvd. E. lb. .24¼- —
l.c.l., same basis ... lb. .25¼- —
tanks, same basis ... lb. .21¾- —
Furfuryl, cns., works ... lb. .29 - —
dms., c.l., Memphis, Tenn. ... lb. .20 - —
Newark, N. J. ... lb. .21½- —
l.c.l., Memphis, Tenn. ... lb. .21 - —
Newark, N. J. ... lb. .22½- —
tanks, Memphis, Tenn. ... lb. .184 - —
Hydroabietyl, tech., solid, Zone 1, dms., c.l., dlvd. lb. .29¼- —
l.c.l., dlvd ... lb. .29¾- .30¼
tanks, dlvd ... lb. .27¼- —

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.

Isoamyl, dms., c.l., works, frt. alld. E lb. .28 - —
l.c.l., same basis ... lb. .29 - —
tanks, same basis ... lb. .25 - —
Isobutyl, dms., c.l., dlvd ... lb. .15½- —
l.c.l., dlvd ... lb. .16½- —
tanks, dlvd ... lb. .13 - —
Iso-octyl, dms., c.l., dlvd. E ... lb. .23½- —
l.c.l., dlvd E ... lb. .24½- —
tanks, dlvd E ... lb. .21 - —
Isopropyl, refd. 91%, dms., c.l., dlvd gal. .53 - —
l.c.l., dlvd ... gal. .60 - —
tanks, dlvd ... gal. .37 - —
95%, c.l., dlvd ... gal. .55 - —
l.c.l., dlvd ... gal. .62 - —
tanks, dlvd ... gal. .39 - —
99%, dms., c.l., dlvd ... gal. .57 - —
l.c.l., dlvd. ... gal. .64 - —
tanks, dlvd ... gal. .41 - —
Lauryl, bots. ... lb. 2.00 - 2.50
Methyl (see Methanol).
Methylamyl (see Methyl isobutyl carbinol).
Octyl, perfumer's grade, bots lb. 1.60 - 3.25
tech. (see Octanol, normal).
2-Phenylethyl, extra, dms ... lb. 1.14 - 1.45
standard, dms ... lb. 1.10 - 1.60
n-Propyl, dms., c.l., dlvd ... lb. .13¼- —
l.c.l., dlvd ... lb. .14½- —
tanks, dlvd ... lb. .11 - —
Tetrahydrofurfuryl, dms., c.l. or t.l., f.o.b. Memphis, Tenn lb. .37 - —
l.c.l. or l.t.l., f.o.b. Memphis, Tenn lb. .38 - —
f.o.b. Newark, N. J ... lb. .40 - —
tanks, dlvd. E. of Denver ... lb. .365 - —
dlvd. W. of Denver ... lb. .375 - —
Tridecyl, mixed isomers, dms., dlvd lb. .26¼- —
l.c.l., dlvd ... lb. .27½- —
tanks, dlvd ... lb. .24 - —
Wood (see Methanol).
Aldol, 95%, dms., works ... lb. .23 - —
denaturing grade, dms ... gal. 2.15 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .80 - —
l.c.l., dlvd ... lb. .85 - —
Aletris root, bgs ... lb. 1.75 - 1.85
Algin (see Sodium alginate).
Alizarine (see 1,2-dihydroxy anthraquinone).
Allethrin, 90%, dms., frt. alld ... lb. 28.80 - 28.90
soln., 20% dms., 200-2,000 lb. lots, frt. alld ... lb. 6.50 - 6.55
2½% dms., frt. alld ... lb. .95 - 1.00
Allspice (see Pimento).

Allyl bromide, cbys., works ... lb. 1.45 - 1.50
Chloride, dms., c.l., dlvd ... lb. .17 - —
l.c.l., dlvd ... lb. .18 - —
tanks, dlvd ... lb. .15 - —
Aloe, Cape, cs ... lb. .50 - —
powd., cs ... lb. .65 - —
Curacao, kgs ... lb. .60 - —
Aloin, USP, bbls., dms., kgs ... lb. 3.35 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs 4.30 - —
lump, dms., works ... 100 lbs 5.05 - —
powd., dms., works ... 100 lbs 5.20 - —
USP, burnt, dms. ... lb. .20 - .21
hydrous, dms. ... lb. .07¾ .08
Potassium, gran., bgs., works, 100 lbs. 4.55 - —
lump, dms., works ... 100 lbs 5.30 - —
powd., dms., works ... 100 lbs 5.45 - —
USP, burnt, dms ... lb. .20 .21
hydrous, dms ... lb. .07¾ .08
Potash-chrome, dms ... lb. .17 —
Alumina, calcined, bgs., c.l., works, lb. .0455- —
l.c.l., works ... lb. .048 - .0755
Aluminum acetate, basic soln., 24%, bbls. l.c.l. works lb. .14 —
Chloride, com'l, anhyd., dms., c.l., works, frt. equald lb. .16 - —
l.c.l., works, frt. equald lb. .16½- —
cryst., dms., c.l., works 100 lbs. 16.00 - —
l.c.l., works ... 100 lbs. 17.50 - —
soln. 32°, cbys, c.l., works lb. .0445- —
l.c.l., works ... lb. .0520- .1290
tanks, works ... 100 lbs. 3.45 - —
NF, gran., dms., works ... lb. .29 - .30

Aluminum fluoride, tech., anhyd., bgs., c.l., works ... lb. .16¾- —
l.c.l., works ... lb. .17¾- .19¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Formate, basic soln., dms., c.l., works lb. .12 - —
l.c.l., works ... lb. .12½- —
Hydrate, heavy, bgs., c.l., frt. frt. equald lb. .032 - —
20,000-40,000 lb. lots, same basis lb. .0345- —
2,000-20,000 lb. lots, same basis lb. .0445- —
bulk, same basis ... lb. .0295- —
Hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
contract, works lb. .21 - —
9-9½% Al_2O_3, fib. dms., works lb. .19 - —
contract, works lb. .18 - —
dried, USP, XIV, fib. dms., works lb. .82½- —
contract, works lb. .79½- —
tech. powder (see Aluminum hydrate).
Metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2710- —
pigs, 10,000-lb. lots, frt. alld. lb. .2500- —
Oxide, amorphous (see Alumina, calcined).
Paste, lining, extra-fine, dms ... lb. .63 - —
standard grade, dms ... lb. .48 - —

Aluminum powder, lining extra, fine, dms lb. 1.09 - —
standard grade, dms ... lb. .78½- —

Aluminum powder and paste prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10-lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Resinate, precip., 2.1% Al, dms., 100 lbs. 7.26 —
Stearate, dibasic, ctns., c.l. lb. .37 —
l.c.l. ... lb. .38 42
monobasic, ctns., c.l. ... lb. .37 —
l.c.l. ... lb. .38 42
tribasic, ctns., c.l. ... lb. .37 —
l.c.l. ... lb. .38 42
Sulfate, coml., bulk, c.l., works, 100 lbs. 1.85 —
grd., bgs., c.l., works ton 37.00 —
lump, bgs., c.l., works ton 40.00 —
Iron-free, bgs., c.l. works, frt. equald 100 lbs 3.55 —
l.c.l., works, frt. equald 100 lbs. 3.95 4.55
Prices 1 per ton higher in the South.
USP, gran., dms., works ... lb. .29 - .30
powd., dms., works ... lb. .36 .37
Trihydrate, heavy (see Aluminum hydrate, heavy).

versatile
CSC emulsifier
and chemical
intermediate

$CH_3C(CH_3)NH_2CH_2OH$

AMP

2-AMINO-2-METHYL-1-PROPANOL

use AMP as an emulsifier

AMP oleate is an economical emulsifier in water-wax emulsions. That's because AMP oleate is effective in lower concentrations than are required for comparable performance with other amine soaps. Emulsions made with relatively low concentrations of AMP oleate are stable and unchanged after repeated freeze-thaw cycles and heat stability tests. In properly formulated floor wax emulsions, AMP oleate imparts high gloss and excellent leveling characteristics.

The higher fatty acid soaps of AMP are powerful emulsifying agents in cleaners, polishes, dressings, self-polishing floor waxes, and emulsion-type paints. Evaporation loss and objectionable fumes are minimized during emulsion manufacture, due to AMP's relatively high boiling point. Films deposited from AMP-made emulsions have excellent water resistance and durability.

use AMP as a chemical intermediate

AMP forms substituted amides with esters, anhydrides, and acyl halides. AMP also reacts with alkyl halides, aldehydes, ketones, carbon disulfide, and many other compounds. These reactions suggest the use of AMP in the synthesis of surface-active agents, detergents, and vulcanization accelerators for rubber.

PHYSICAL PROPERTIES

Molecular Weight	89.14
Boiling Point, at 760mm	165°C
Melting Point	30-31°C
Specific Gravity at 20/20°C	0.934
pH of 0.1M Aqueous Solution at 20°C	11.3
Solubility	Miscible with water; aromatic hydrocarbons, alcohols, esters. Insoluble in aliphatic hydrocarbons.

SPECIFICATIONS

Neutral Equiv.	88.5-91.0
Color, APHA, max.	20
Water, by wt., max.	0.8%
Distill. Range	156°C-177°C
Below 161°C, max.	10%
Above 168°C, max.	5%
Odor	Characteristic
Non-volatile matter by weight, max.	0.005%

OTHER AMINOHYDROXY COMPOUNDS

AMPD (2-Amino-2-methyl-1, 3-propanediol) $CH_2OHC(CH_3)NH_2CH_2OH$

AEPD (2-Amino-2-ethyl-1, 3-propanediol) $CH_2OHC(C_2H_5)(NH_2)CH_2OH$

TRIS AMINO (Tris [hydroxymethyl] aminomethane) $(CH_2OH)_3CNH_2$

AB (2-Amino-1-butanol) $CH_3CH_2CHNH_2CH_2OH$

AMP is another important chemical derived from CSC's Nitroparaffins. For samples and additional information write to:

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IN CANADA: Reliance Chemicals, Ltd., Montreal. IN MEXICO: Comsolmex, S.A., Mexico 11, D. F.

CSC INDUSTRIAL CHEMICALS

Ambergris, gray, bots ..... oz 8.00 - 10.00
p-Aminoacetanilide, frt. alld. .... lb. 1.57 - —
Aminoazotoluene base, bbls., 100% basis lb 1.03 - 1.18
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
l.c.l., dlvd ..... lb. .485 - —
tanks, dlvd ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
l.c.l., frt. alld ..... lb. .45 - —
tanks, frt. alld ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots, lb 2.05 - —
smaller lots ..... lb. 2.50 - —
p-Aminophenol, dms., frt. alld lb 1.15 - —
Aminophylline, USP 100-lb dms lb 3.55 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald ton.75.00 - —
refrigeration, tanks, works, frt equald ton.82.50 - —
aqueous, tanks, works, anhyd basis ton.83.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald. 100 lbs. 8.25 - —
l.c.l., same basis ... 100 lbs. 9.25 - —
white grn. (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .38 - —
Benzoate, USP, dms., kgs. 4,000-lb. lots frt. alld lb. .80 - —
smaller lots, frt. alld lb. .81 - 1.08
Biborate, gran., dms., c.l., works ton.319.50 - —
ton lots, ex whse ..... ton.397.00 - —
smaller lots, ex whse ... ton.402.00 - —

Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
l.c.l., works 100 lbs. 9.00 - —
Bichromate, dms., works lb. .43 .43
Bifluoride, dms., dlvd lb. .2145- .2245
Bromide, NF, gran., bbls lb. .43 - —
Powdered ammonium bromide 10c per lb. higher
Carbonate, USP, lump, dms. ... lb. .16 - —
Chloride, tech., fine gran., bgs., c.l., works 100 lbs. 5.75 - —
l.c.l., works 100 lbs. 7.75 - 8.20
USP, gran., bbls., dms lb. .17¼ - —
Citrate, dibasic, bbls ..... lb. .77 - —
Dichromate (see Ammonium bichromate).
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia aqueous).
Hypophosphite, NF, dms. .... lb. 3.07 - —
Iodide, NF, dms., bots ..... lb 4.26 - 4.38
Linoleate, 80%, dms., works lb. .50 - .85
Nitrate, dom., fert. grade, 33.5% N., bgs., western works, frt. equald, base price ton.64.00 - —
imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 per ton, base price ton.64.00 - —
August discount ton. 5.00 - —
western, bgs., c.l., f.o.b. cars, Los Angeles ton.79.69 - —
with dolomite, 20.5% N, bgs., Hopewell, Va ton.51.00 - —
Oxalate, fine gran., dms lb .26½- .31

Ammonium pentaborate, gran., bgs., c.l., works ..ton.187.50 - —
ton lots, ex whse ....ton.273.50 - —
smaller lots, ex whse ....ton.278.50 - —
Ammonium pentaborate powder $10 per ton higher.
Persulfate, kgs ..... lb. .38 - .47½
Phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
l.c.l., same basis ... lb. .10 - —
dibasic, NF, V bbls., dms. lb. .46 - —
tech., bgs., c.l., works, frt. equald lb. .09¼- —
l.c.l., same basis ..... lb. .10 - —
Salicylate, NF, dms., kgs. ..... lb. 1.62 - 1.64
Silicofluoride, dms., works lb. .11¾- .13¼
Sulfamate, bgs., c.l., t.l., works lb. .18 - —
l.c.l., works lb. .22 - —
Sulfate, coke-oven, bulk, producing ovens, base price ton.32.00 - —
syn., bulk, c.l., f.o.b. works ton.32.00 - 42.00
purif., dms., works lb. .09 - .09½
Sulfide liq., 40-44%, tanks, frt. equald., 100% basis ton.160.00 - —
Sulfocyanide, tech (see Ammonium thiocyanate).
Thiocyanate, tech., dms., c.l., works lb. .20 - —
l.c.l., works lb. .22 - .26
Thioglycollate, coml., cbys., 100% basis lb. 1.35 - 1.65
highly purif., cbys., 100% basis. lb. 1.70 - 1.96
Thiosulfate, cryst., photo grade, fib. dms., frt. alld lb. .65 - —
d-Amphetamine hydrochloride dibasic, bots lb.28.00 - —
dl, dms ..... lb. 6.00 - —
d-monobasic, bots ..... lb.28.00 - —
d-Phosphate, dibasic, bots ..... lb.28.00 - —
dl, dms ..... lb. 6.00 - —
d-Sulfate, dms ..... lb.28.00 - —
dl, dms ..... lb. 6.00 - —

Amyl acetate, ex fusel oil, tech., dms. c.l. frt. alld. E. of Rockies lb. .18 - —
l.c.l., same basis ... lb. .19 - —
tanks, same basis ... lb 15½ - —
ex pentane, reg. dms. c.l., dlvd. lb. .18½- —
l.c.l., dlvd ..... lb. .19½- —
tanks, dlvd ..... lb. .16 - —
tech., dms., c.l., dlvd ..... lb. .16½- —
l.c.l., dlvd ..... lb. .17½- —
tanks, dlvd ..... lb. .14 - —
syn., oxo process, dms., c.l., dlvd lb. .19¾- —
l.c.l., dlvd ..... lb. .20¾- —
tanks, dlvd ..... lb. .18 - —
Alcohol (see Alcohol, amyl).
n-Butyrate, dms ..... lb. 1.00 1.25
Cinnamic, aldehyde, dms ..... lb. 1.70 - 2.20
Nitrite, USP, bots ..... lb 1.75 1.83
Salicylate, cns., dms ..... lb. .82 1.10
o-tert-Amyl phenol, dms., c.l., works. lb. .49½ —
l.c.l., works ..... lb. .50½- —
tanks, works ..... lb. .47 —
p-tert-Amyl phenol, dms., c.l., works. lb. .26¾- —
l.c.l., works ..... lb. .27¾ —
tanks, works ..... lb. .25¾ —
Anethole, NF, cns., dms ..... lb 1.60 1.80
tech., dms ..... lb 1.10 1.15
Angelica root, dom., bls ..... lb. .80 .90
Aniline oil, dms., c.l., frt. alld lb. .22 - —
l.c.l., frt. alld ..... lb. .23 - —
tanks, frt. alld ..... lb. .21 - —
tankwagons, min. 2,000 gals. lb. .21½- —
Salt, dms, c.l. truckloads, 20,000 lbs., min. frt. alld. lb. .33 - —
l.c.l., same basis ..... lb. .35 - —
Anise seed, Mexican, bgs. ..... lb. No price.
Spanish, bgs. ..... lb. .26 - —
Syrian, bgs. ..... lb. .26 - —
Anisic aldehyde, bots., dms ..... lb 1.95 2.70
o-Anisidine, dms., c.l., frt. alld ..... lb. .80 —
l.c.l., same basis ..... lb. .82 - —
tanks, same basis ..... lb. .78 - —
p-Anisidine, dms. works ..... lb. .27 - —
Annatto seed, whole, bgs ..... lb. .15 .17
Anthracene, 90-95% bbls., ton-lots, works lb. .83 - —
smaller lots, works lb. .95 - —
Anthraquinone, 99.5% bbls. c.l., frt. alld lb. .83 - —
l.c.l., same basis ..... lb. .86 - —
electrical grade, bbls., l.c.l., same basis lb. .91 - —
Antimony butter (see Antimony trichloride).
Metal, bulk, c.l., mines ..... lb. .33 - —
cs., c.l., mines ..... lb. .33½- —
Oxide, bgs., c.l., frt. alld ..... lb. .27 - —
l.c.l., frt. alld ..... lb. .28½- —
Sulfide, approx. 65%, bgs., dlvd lb. .23 .26
Trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
l.c.l., works ..... lb. .43 - —
Antimony-potassium tartrate, tech., powd., dms lb. .69½- .74½
USP, powd., dms ..... lb. .74½- .75½
Antipyrine, NF, 200-lb bbls lb 3.50 —
Apomorphine hydrochloride, USP, 5 oz. lots, bots oz.35.60 - —
Areca nuts, powd., bbls ..... lb. .13 - —
Arecoline hydrobromide, NF, bots., tins oz 4.50 - 6.00
l-Arginine monohydrochloride, dms., 1 kilo lots kilo.74.80 - —
Arnica flowers (true montana), bls. lb. 2.25 - —
Arsenic metal, lump, bbls, ex whse. lb. .54 - —
Trioxide, USP, dms ..... lb. .48 - —
White, powd., bbls., c.l., dlvd lb. .05½- —
l.c.l., dlvd ..... lb. .06½- .07½
Asafetida, cn ..... lb. .40 - —
powd., bbls., dms ..... lb. .85 - —
Asbestine (see Talc, fibrous, N. Y.).
Asbestos, Canadian, crude, No. 1, c.l. (20 tons) mines ton.1,400.00- —
No. 2, c.l. (20 tons), mines ton.750.00 - —
Run-of-mine, c.l. (20 tons) mines ton.611.60 - —
3K, c.l. (20 tons), mines ton.480.00 - —
3R, c.l., (20 tons) mines ton.408.10 - —
3T, c.l. (20 tons), mines ton.382.80 - —
3Z, c.l. (20 tons) mines ton.353.10 - —
4K, c.l. (20 tons), mines ton.190.30 - —
4M, c.l. (20 tons), mines ton.190.30 - —
4T, c.l., (20 tons), mines ton.171.60 - —
4Z, c.l. (20 tons), mines ton.171.60 - —
5D, c.l. (20 tons), mines ton.135.00 - —
5K, c.l. (20 tons), mines ton.135.00 - —
5M, c.l. (20 tons), mines ton.122.35 - —
5R, c.l. (20 tons), mines ton.115.50 - —
6D, c.l. (30 tons), mines ton.82.00 - —
7D, c.l. (30 tons), mines ton.72.00 - —
7F, c.l. (30 tons), mines ton.68.25 - —
7H, c.l. (30 tons) mines ton.58.00 - —
7K, c.l. (30 tons), mines ton.48.30 - —
7M, c.l., (30 tons), mines ton.42.00 - —
7R, c.l. (30 tons), mines ton.41.00 - —
7RF c.l. (30 tons), mines ton.42.00 - —
7T, c.l., (30 tons), mines ton.39.00 - —
7TF, c.l. (30 tons), mines ton.42.00 - —
8S, c.l. (30 tons), mines ton28.35 - —
Asbestos c.l. prices are in U. S. funds, l.c.l. lots $4 per ton higher.
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.37.00 - —
select, 350° F. fusing pt., bgs., c.l., mines ton.38.00 - —
270°-295°F., fusing pt., bgs., c.l., mines ton.37.00 - —
seconds, 300°-390°F fusing pt., bgs., c.l., mines ton.32.00 - —
Manjak, No. 10, crude, dms., works lb. .06¼- —
Petroleum, cut-back, tanks, tankwagon, refy. gal. .09 - —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy ton.20.00 - —
Aspirin, (see Acid acetylsalicylic).
Atropine, NF, bots ..... oz. 3.90 - 4.50
Sulfate, NF, bots ..... oz. 2.25 - 2.65

B

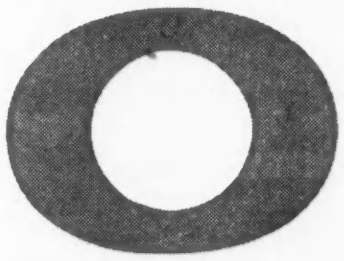
Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .70 - —
less than 1,000,000,000 units. 50,000 units. .75 - —
Balm of Gilead buds, dried, bgs lb. 1.35 - 1.45
Barberry root bark, bgs ..... lb. .28 - .31
Barbital, USP, 100-lb. dms ..... lb. 4.50 - —
Sodium, USP, dms ..... lb. 4.75 - 4.77
Barium carbonate, precip., bgs., c.l., works ton.100.00 - —
smaller lots, works ... ton.110.00 - —
Chlorate, kgs., works ..... lb. .32 - .36
l.c.l., t.l., frt. equald ton.285.00 - —
Chloride anhyd., bgs., c.l., works. ton.165.00 - —
l.c.l., works ..... ton.175.00 - —
NF, cryst., dms ..... lb. .20 - —
tech., cryst., bgs., c.l., works. 100 lbs. 6.50 - —
l.c.l., works ..... 100 lbs. 7.00 - —
Chromate, bgs., frt. equald lb. .35 - —
Dioxide (see Barium peroxide).

Oxygen doesn't always mean "life"

Eastman antioxidants are extending the useful life of products in many fields

Many products need protection *against* oxygen.

Lard, a typical example, turns rancid at room temperatures unless protected by the addition of an antioxidant. "Returns" and complaints of off-flavor and rancidity have long been the bane of vendors of shelled nuts. Today, thanks to the availability of an Eastman antioxidant, nut



processors can practically eliminate such complaints and greatly expand their product's distribution. The longer shelf life made possible by Eastman antioxidants, has likewise helped potato chip manufacturers broaden their selling area.

Eastman antioxidants have also helped to develop a new outlet for inedible fats and oils . . . animal feeds. Added to feed in amounts up to 4% to 5%, these fats improve the feed and represent a market of 200-300 million pounds annually. This was a totally new market for fats and helped ease a fat-surplus problem for the meat industry. Yet, it would have been impossible if antioxidants had not been available to stabilize the fat and keep the feeds fresh and palatable.

Eastman antioxidants protect many different food products, but an even broader field is covered by their use in industrial products.

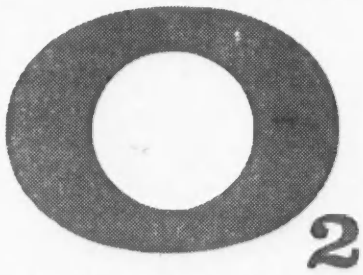
In gasoline and motor fuels, antioxidants made by Eastman protect against the formation of power-robbing gum.

In transformer and turbine oils, Eastman antioxidants extend service life by preventing the quick breakdown that might otherwise occur at the high working temperatures encountered.

In plastics, Eastman antioxidants help stabilize plasticizers for vinyl resins and are also used to protect polyethylene against deterioration during molding and extrusion and upon extended exposure.

In rubber, antioxidants play a well-known role in protecting against aging and heat deterioration. Rubber also needs protection against ozone – one of the most powerful oxidizing agents known. Even the minute concentration of ozone in the atmosphere can severely damage rubber products. To combat this attack, Eastman antiozonants are available.

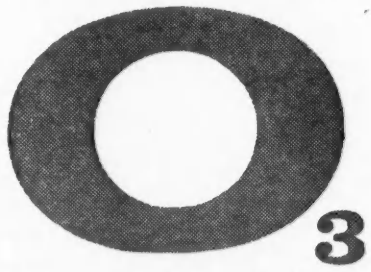
In the agricultural field Eastman antioxidants are extending the effectiveness of such important pesticides



as pyrethrum. In poultry feeds other Eastman antioxidants are widely used to bring more chicks to faster and more profitable maturity by protecting vitamin content, stimulating growth, improving pigmentation, increasing the utilization of Vitamin A from carotene and safeguarding chicks against such deficiency diseases as encephalomalacia.

This list could be continued to show that whenever oxygen poses a destructive threat to organic compounds there is a good chance that an Eastman antioxidant is available for effective counter measure.

Perhaps one of the many antioxidants made by Eastman could help you add life to some product you



make or use. Perhaps, as the foregoing examples illustrate, one of these antioxidants could help you combat rancidity, bad odor, off-flavor, loss of nutrient value, discoloration, embrittlement or aging.

Eastman antioxidants have helped many companies extend present markets and even develop new markets. If your product – be it food, agricultural or industrial—needs protection against oxidative deterioration, call in Eastman. Eastman's food and industrial antioxidant laboratories are staffed with specialists anxious to help you explore the benefits, the use, and the cost of antioxidants.

For more information, write to EASTMAN CHEMICAL PRODUCTS, INC., a subsidiary of Eastman Kodak Company, KINGSPORT, TENNESSEE.

Products in these fields know the value of Eastman antioxidants

FOOD	INSECTICIDES
RUBBER	ANIMAL FEEDS
PLASTICS	HYDRAULIC FLUIDS
PETROLEUM	TRANSFORMER OILS
VEGETABLE and ANIMAL OILS	

Eastman ANTIOXIDANTS

to combat oxidative deterioration

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; New York City; Framingham, Mass.; Cincinnati; Cleveland; Chicago; St. Louis; Houston. **West Coast: Wilson Meyer Co.,** San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

LYSINE VALUE... stressed by clinicians*

LYSINE IN BULK

ANNOUNCED BY MERCK

Newer studies have promoted rapid extension of the markets for this amino acid in both pediatric and geriatric nutrition.

Lysine Merck offers highly practical advantages:

1. **High purity (at least 97.0% of the active L-form)**
2. **Uniform fine particle size (all passing #80 mesh)**
3. **Practically odorless**
4. **Unsurpassed technical service to aid your product development**

*Forty-six recent papers including clinical reports on lysine in dietary supplementation and on other amino acids are abstracted or referred to in the Merck Lysine Annotated Bibliography, which also indicates potentialities for lysine formulations. Available too, to help in your development of lysine-containing preparations, is our 10-page "Lysine Review"—providing information on pharmaceutical properties, assay methods, and other valuable data. Ask your Merck representative for your copies or just drop a card to MERCK & CO., INC., Chemical Division, Rahway, New Jersey.

MERCK

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Barium Hydrate—Borax

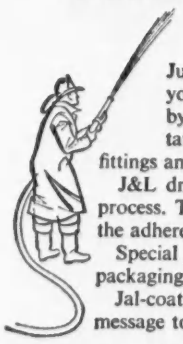
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton 208.00 - —
l.c.l., l.t.l., frt. equald ton 218.00 - —
Monoxide (see Oxide).
Nitrate, bbls., c.l., t.l. dlvd lb .16 - —
l.c.l., l.t.l. dlvd lb .17 - —
Oxide, grd., dms., c.l., t.l., frt equald ton 275.00 - —
Peroxide dms. frt. equald lb .20 - —
Stearate ctns., c.l., frt alld lb .39 - —
l.c.l. same basis lb .40 .44
Sulfate, tech. (see Barytes and blanc fixe).
X-ray dms lb .15 - .15½
Sulfide, dms., c.l., works ton 85.00 - —
l.c.l. works ton 95.00 - —
Barytes, Southern, off-color, bgs., mines ton 25.00 - —
95-75% bgs. mines ton 25.00 - —
water-grd., paper bgs., c.l., St Louis ton 49.00 - —
ex-whse. N. Y. ton 70.85 - —
Bauxite, bulk, mines ton 6.75 -10.00
Bay leaves (see Laurel leaves).
Belladonna, leaf, bls lb .35 .37
root, bls lb .45 .50
Bentonite, dom., 200 mesh, bgs., c.l., mines ton 14.00 - —
imp. Italian, white, high gel., bgs. 5-ton lots, ex whse ton 84.00 - —
1 ton lots, ex whse ton 87.00 - —
low gel., bgs., 5-ton lots, ex whse ton 82.35 - —
1 ton lots ex whse ton 85.35 - —
Benzal chloride, chys., works lb .44 - —
Benzaldehyde, NF, dms lb .74 1.05
tech., chys., dms., t.l. lb .43 - —
smaller lots lb .44 - —

Benzene (See Benzol).
Hexachloride, 25% and 99% gamma isomer (see Lindane)
tech., high gamma, dms., c.l., dlvd., gamma unit-lb. .0075- .008
l.c.l., works, gamma unit-lb. .009 .0095
low gamma, dms., c.l. dlvd.., gamma unit-lb. .0075- —
l.c.l., works, gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
l.c.l., same basis lb. 1.21 - —
Sulfate, tech., frt. alld., 100% basis lb. 1.21 - —
Benzocaine, dms. lb 3.48 3.50
Benzol, coaltar, pure or nitration, tanks, works:—
Bethlehem, Pa gal .36 - —
Birmingham district gal .36 - —
Chicago district gal .36 - —
Cleveland district gal .36 - —
Geneva, Utah gal .36 - —
Johnstown, Pa. gal .36 - —
Lackawanna, N. Y. gal .36 - —
Lone Star, Texas gal .36 - —
Lorain, Ohio gal .36 - —
Middletown, Ohio gal .36 - —
Minnequa, Colo gal .36 - —
Philadelphia district gal .36 - —
Pittsburgh district gal .36 - —
Sparrows Point, Md gal .36 - —
Syracuse, N. Y. gal .36 - —
Terre Haute, Ind. gal .36 - —
Youngstown, Ohio gal .36 - —

Benzophenone, dms. lb. 1.40 - 1.70
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald lb. .18 - —
smaller lots, frt. equald lb. .20 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald lb. .22 - —
l.c.l., same basis lb. .23 - —
tank trucks, dlvd. Metropolitan area lb. .21 - —
Peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c., cns., dms lb. .60 - 1.00
Alcohol (see Alcohol, benzyl).
Benzoate, USP, f.f.c. cns., dms lb. .72 - 1.10
Chloride, tech., 13-gal. cbys., dms., c.l., works, frt. equald. lb. .23 - —
l.c.l., same basis lb. .24 - —
tank trucks, dlvd. Metropolitan area lb. .21 - —
A 2½c differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices were ½c lower
Cinnamate, cns. lb. 3.60 - 3.90
Formate, cns lb. 1.80 2.10
Isoeugenol, cns lb. 9.85 - —
Propionate, bots. lb 1.35 1.65
Salicylate, bots. lb. 1.60 - 1.85
Benzylidine acetone, bots lb. 1.75 1.80
Chloride (see Benzal chloride).
Berberine bisulfate, cns lb. 35.00 -36.25
Hydrochloride, bots lb. 35.00 -36.25
Betaine, anhyd., 10,000-lb. lots, frt. alld lb. 3.00 - —
Hydrochloride, 5,000-lb. lots, frt. alld lb. 1.60 - —
Monohydrate, 10,000-lb. lots, frt. alld lb. 2.60 - —
Betagammapicoline (see b.g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene).

Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, technical).
Biotin, cryst., bots gram 10.00 - —
Biphenyl (see Diphenyl).
Bismuth chloride, bars lb 5.11 - —
Hydroxide, dms. lb 4.65 - —
Metal, bxs. ton lots lb 2.25 - —
Nitrate, cryst., dms. lb 2.10 - 2.17
Oxide, anhyd., dms lb 4.47 5.05
Oxychloride, dms lb 4.37 4.42
Phenolsulfonate, fib. dms lb 5.22 —
Subcarbonate, USP, dms. lb 3.20 - —
Subgallate, NF, fib. dms. lb 3.15 - —
Subiodide, fib. dms lb 5.37 - —
Subnitrate, NF, dms lb 2.65 - —
Subsalicylate, USP, dms lb 3.50 - —
Bismuth-ammonium citrate, USP, powd. jars lb 4.22 —
Bisphenol-A, c.l., t.l., frt. alld lb 29¾ - —
l.c.l., same basis lb. 30¾ - —
Black, acetylene, imp., bgs., c.l., duty and freight extra lb. .17 —
cs., l.c.l., ex whse lb .22½ 26
Ash (see Barium sulfide).
Bone, dms., l.c.l. frt. alld lb .17 23¼
Pacific coast bone black prices 2c per lb higher
Carbon, channel, pigment, high color beads, ctns., c.l., works lb. .72 - —
l.c.l. dlvd. or whse lb. .78 - —
medium color, uncompressed bgs., c.l. works lb. .12 —
l.c.l. dlvd. or whse. lb. .19 - —
rubber, beads, bulk, c.l., works lb. .07 —
bgs., c.l., works lb. .074 —
l.c.l., works lb. .1225- —
furnace, fast extruding, bgs., c.l., works lb. .06 - —
ctns., l.c.l., whse lb .10 —
high abrasion, bulk, c.l. works. lb .0750- —
bgs., c.l. works lb. .0790- —
l.c.l., dlvd. or whse lb. .122 .125
high modulus, bgs., c.l., works. lb. .0550- —
ctns., l.c.l. whse lb .0950- —
semi-reinforcing, bgs., c.l., works lb .045 —
bgs., ctns., l.c.l. whse lb .085 —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure, bgs., c.l., works. lb. .13¼- —
l.c.l., works lb. .13½- —
Lamp, bgs., c.l., works lb. .16 - .45
Mineral, bgs., works lb. .0160- .0675
Blackberry root bark, bls lb. .45 —
Black haw root bark, bls lb. .63 .65
tree bark, bls lb. .45 - .50
Blanc fixe, dry, byproduct, bgs., c.l., works ton 190.00 - —
l.c.l. works ton 200.00 - —
direct process, bgs., c.l., works ton 110.00 - —
l.c.l. works ton 120.00 - —
N. Y. whse ton 155.00 - —
Blood, dried, 16-16½% ammonia, unit-ton. 5.25 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago unit-ton. 5.25 - —
soluble, bgs., c.l. lb. .13 - .14
t.l. lb. .15 .17
l.t.l. lb. .15½- .35½
Bloodroot, bls lb .48 .50
Blue, alkali, dry, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb 2.10 - —
toner, 125-lb. bbls., litho flushed, same basis lb. 1.20 - —
Chinese, bbls., c.l., same basis lb. .50 - —
l.c.l., ton lots, same basis lb. .51 - —
smaller lots, same basis lb. .52 - —
Cobalt, genuine, bbls., same basis lb 4.90 - —
Imitation (see Blue, ultramarine).
Dyes (see Dyes).
Iron (see Blue, Chinese, Milori, Potash, Prussian and Soda).
Methyl, violet toner, molybdated, PMA, bbls., same basis lb. 2.75 - —
tungstated, PTMA, bbls., same basis lb. 4.00 - 4.15
Milori, bbls., c.l., same basis lb. .50 - .55
l.c.l., ton lots, same basis lb. .51 - .56
smaller lots, same basis lb. .52 - .57
Peacock, fugitive, 100% color strength, bbls., same basis, lb. .85 - —
Phthalocyanine, full strength, bbls., same basis lb. 3.45 - —
resinated, bbls., same basis lb. 3.00 - —
water dispersable, bbls., same basis lb. 1.54 - —
Potash, CP, bbls., same basis lb .56 - —
Prussian, insoluble, soluble, bbls., c.l., same basis lb. .50 - —
l.c.l., ton lots, same basis lb. .51 - —
smaller lots, same basis lb. .52 - —
Soda, CP, bronze, bbls., c.l., same basis lb. .50 - —
l.c.l., ton lots, same basis, lb. .51 - —
smaller lots, same basis, lb. .52 - —
Ultramarine, cobalt type, dry or pulp, bbls., same basis lb. .39½- .35
jobbing types, bbls., same basis, lb. .19 —
regular types, dry, bbls., same basis lb. .22½- .35
Victoria toner, molybdated, PMA, bbls lb 4.10 —
tungstated, PTMA, bbls lb 5.35 —
Blue dry colors, dlvd. prices ½c higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c higher. Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.
Blue vitriol (see Copper sulfate).
Bluestone (see Copper sulfate).
Bonemeal, steamed, works, E ton. 60.00 - —
Los Angeles ton. 82.50 - —
Bone phosphate, defluorinated (see D) of lime (see Calcium phosphate, tribasic), precipitated (see Calcium phosphate tribasic, NF precip.)
Borax, tech., anhyd., 99%, bgs., c.l., works ton. 80.50 - —
ton lots ex whse. N. Y. or Chi ton. 132.25 - —
smaller lots, works ton. 137.25 - —
bulk, c.l., works ton. 71.50 - —
cryst., 99½%, bgs., c.l., works. ton. 69.25 - —
ton lots ex whse. N. Y. or Chi ton. 121.00 - —
smaller lots, same basis. ton. 126.00 - —

PROTECTION is our business, too



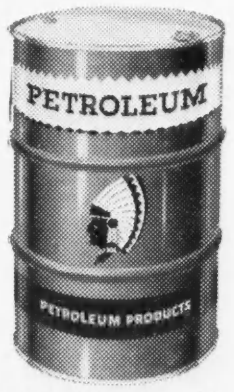
Just as valiant firemen are on around-the-clock alert to protect your life and property—J&L Steel Containers protect your products by providing dependable packaging that assures safety in transportation and storage. Their precise fabrication assures accuracy in all fittings and closures.

J&L drums and pails are chemically cleaned and dried by the Jalizing process. This assures a clean and dry, rust-inhibiting surface and increases the adherence and durability of decoration and interior lining.

Special protective interior linings are available to provide the best possible packaging for your products.

Jal-coat, J&L's lithographing process, applies your trademark and sales message to the finished container . . . *no side seam touch-up is ever required.*

Plants located at Atlanta, Ga.; Bayonne, N. J.; Cleveland, Ohio; Kansas City, Kansas; Lancaster, Pa.; New Orleans, La.; Philadelphia, Pa.; Port Arthur, Texas; and Toledo, Ohio.



Jal-Coat, J&L's exclusive lithographing process, adds sales appeal to your products.

Jones & Laughlin
STEEL CORPORATION · PITTSBURGH

CONTAINER DIVISION
405 LEXINGTON AVE., NEW YORK 17, N. Y.

J&L STEEL

Borax, tech., gran., decahydrate, 99½%, bgs., c.l., works, ton 43.25 - —
ton lots ex whse. N. Y. Chi. ton 95.00 - —
smaller lots, same basis, ton 100.00 - —
bulk, c.l., works ton 36.75 - —
pentahydrate, 99½%, bgs., c.l., works ton 57.75 - —
ton lots ex whse. N. Y. ton 109.50 - —
smaller lots, same basis, ton 114.50 - —
bulk, c.l., works ton 51.50 - —
powd., 99½%, bgs., c.l., works, ton 48.25 - —
ton lots ex whse. N. Y. or Chi ton 100.00 - —
smaller lots, same basis, ton 105.00 - —
USP borax $15 per ton higher.

Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt. lb. .18 - .24
l.c.l. same basis lb. .19 .26
Borneol, cns lb 2.50 4.5
Boron trifluoride gas, cyls., truck-load, works lb. .62 - —
l.t.l. works lb. .70 - —
Brazilwood extract (see Hypernic extract)
Brimstone (see Sulfur).
Bromine, purif., cs., c.l., t.l., dlvd. E of Rockies lb. .32 - —
l.c.l., same basis lb. .34 - .39
ret. dms. c.l., t.l. dlvd E of Rockies lb. .31 - —
l.c.l., same basis lb. .31 - .33
tanks, same basis lb. .22½- —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
l.c.l., same basis lb. .50 - —
Bromoform, pharmaceutical grade, bots lb 1.62 2.60
cbys lb. 1.52 —
Bromstyrol, bots lb. 5.40 5.70
Bronze powder aluminum (see Al).
Brown iron oxide pure bgs., c.l., works lb. .14¼- —
l.c.l. works lb. .14½- —
Oxide, metallic, bgs., works lb. .04 - —
Sienna, burnt, paper bgs., c.l., works lb. .06¼- .17¼
l.c.l. works lb. .06½ .17½
raw, paper bgs., c.l. works lb. .06¼- .16¼
l.c.l. works lb. .06½- .16½
Umber, burnt, American, c.l., works lb. .07 - .07¾
l.c.l. works lb. .07¼- .08
Turkey type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .07¾- —
raw, American, bgs., works lb. .07½- .08¼
Turkey-type bgs. works lb. .06¾- .07
Vandyke, bbls. works lb. .09½- .12
Brucine, cns. 100-oz. lots oz. 20 .25
Sulfate NF cns. 100-oz. lots oz. 15 - .20
Buchu leaves, bls lb. 1.30 - —
Butadiene, refd. cyls., c.l. refy lb. .21 - —
l.c.l. refy lb. .22 - —
tanks, refy lb. .15 - —
Butane, indust., tanks, group 3 gal. 04½- —
n-Butyl acetate, ferment., dms., c.l., frt. alld lb. .16½- —
l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14 - —
syn., dms., c.l., dlvd. E lb. .16½- —
l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14 - —
sec-Butyl acetate, syn. dms., c.l., dlvd. E lb. .13½- —
l.c.l., same basis lb. .14¼- —
tanks, same basis lb. .11¾- —
Butyl alcohol (see Alcohol, n-Butyl).
Aldehyde (see Butyraldehyde)
Chloride, dms., c.l., works lb. .37½- —
l.c.l., works lb. .28¼- —
Ether, dms., c.l. works lb. .33 - —
l.c.l., works lb. .33¾- —
tanks, works lb. .31 - —
Lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½- —
l.c.l. same basis lb. .43½- —
tanks, same basis lb. .40 - —
Laurate, dms., works lb. .39 - —
Methacrylate, dms., c.l., t.l., works, lb. .55 - —
l.c.l., works lb. .55½- —
Oleate, refd., dms., l.c.l., works lb. .32 - —
Phenylacetate, dms lb. 4.50 4.60
Phthalate (se Dibutyl phthalate).
Stearate, dms., c.l., frt. equald, l.c.l., same basis lb. .26½- —
Butylamine (see mono-, di-, and tri-), lb. .25 - —
6-tert-Butyl-m-cresol, dms., c.l., works lb. .55 - —
l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., works, lb. .27½- —
l.c.l. lb. .28½- —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
l.c.l., dlvd lb. .23 - —
tanks, dlvd lb. 19½ —
Butyric ether (see Ethyl butyrate).

C

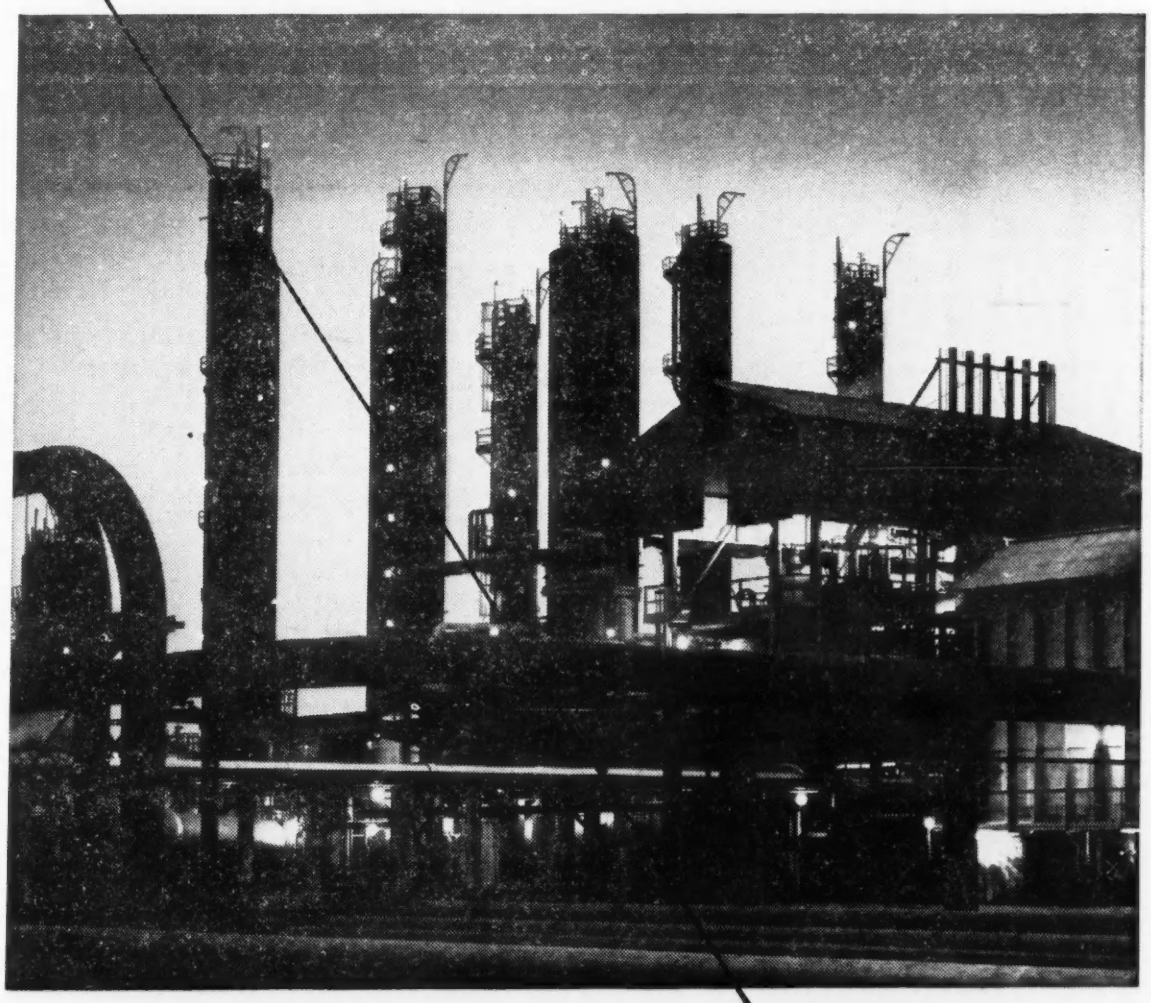
Cacao butter (see Cocoa butter).
Cadmium iodide 25-lb. fib. dms. lb 6.75 - 7.00
Metal ingots or sticks, cs., dlvd. lb. 1.70 - —
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, dms. 100-lb. lots or more lb. 2.80 - —
syn., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, 100-lb. lots or more lb 2.80 - —
Citrated, USP, dms., 100-lb. lots or more lb. 2.70 - —
Calamine, USP, dms lb. .34 - —
Calciferol, cryst., vials, 1-kilo lots, works gram .60 - —
25 to 100 gram lots, works, gram .65 - —
(in edible oil (see Viosterol)
Calcium p-aminosalicylate, fib. dms., 100 lbs. or more, frt. adjusted, lb. 4.00 - —
Arsenate, dealers, bgs., c.l., frt. alld lb. .09 - .09½
Bromide, NF, 100 lbs. or more lb. .92 - —
Carbide, standard generator size, dms., c.l., dlvd ton 134.40 - —
Carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton 10.50 - —
chalk, whiting, 325 mesh, bgs., c.l., works ton 32.00 -34.00
l.c.l., same basis lb. .10 - .10½
water-grd., ½ to 10 microns, bgs., c.l., works ton 30.00 - —
10 to 20 microns, bgs., c.l., works ton 17.00 -18.00
precip., dense, bgs., c.l., works ton 32.50 - —
l.c.l., works ton 42.50 - —
medium, bgs., c.l., works ton 38.00 - —
l.c.l., works ton 48.00 - —
surface treated, bgs., c.l., works ton 37.50 - —
l.c.l., works ton 47.50 - —

Calcium carbonate, precip., ultrafine, bgs., c.l., works ton 110.00 -160.00
l.c.l., works ton 120.00 -175.00
Chloride, cryst., purif., dms lb. .22 - —
flake, 77-80%, paper bgs., c.l., works, frt. equald ton 29.00 - —
liquor, 40%, tanks, frt. equald ton 12.35- —
pellets, bgs., c.l., works ton 35.40 - —
powd., bgs., c.l., works ton 35.00 - —
solid, 73-75%, dms., c.l., frt. equald ton 97.50 - —
l.c.l., works, frt. equald ton 34.00 -71.00
USP, gran., dms. lb. .32 —
Chromate, bgs., frt. equald lb. .29½- .30
Cyanide, dms., c.l., dlvd. E. of Rockies lb. .20 - —
l.c.l., same basis lb. .24 - .55
Cyclamate, 100-lb. fib. dms. lb. 2.95 - —
Gluconate, AA, bbls., dms. lb. .74 - .76
USP, bbls., dms lb. .67 .69
Hydride, dms., works lb. 2.15 3.00
Hypochlorite, high test, 45-lb. cs., dlvd. E. of Rockies cs. 22.95 -25.10
100-lb. dms., same basis dm. 30.80 -34.50
Hypophosphite, dms., ton lots or less lb. .90 .93
Iodide, jars lb. 4.52 —
Lactate, NF, dms., 10,000-lb. lots or more works lb. .36 .40
Mandelate, USP, dms. works lb. 2.10 2.25
smaller lots, works lb. .41 .48
Naphthenate, liq., 4% Ca., dms., frt equald lb. .27¼- —
Nitrate, fertilizer grade, bgs., c.l., Los Angeles ton 46.00 - —
tech., 5-dm. lots, works lb. .13 - —
Pantothenate, dms., bots., frt. adjusted gram .045 - —
Para-aminosalicylate (see Calcium p-Aminosalicylate)
Phenolsulfonate, dms lb .70 - —

Calcium phosphate, dibasic, USP, bgs., c.l., frt. equald 100 lbs. 7.75 - —
t.c.l. frt. equald 100 lbs. 8.50 - —
feed grade, 18½%P, bgs., c.l., t.l., frt. equald ton 79.55 -83.25
t.c.l., frt. equald ton 89.55 -93.25
21% P, bgs., c.l., t.l., frt. equald ton 94.50 —
t.c.l., frt. equald ton 99.50 -104.50
monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 6.90 - —
smaller lots, same basis, 100 lbs. 7.40 - —
tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 8.75 - —
t.c.l., frt. equald 100 lbs. 9.00 - —
Phytate, bgs., works lb. .50 - —
Resinate, precip., dms., frt. alld., works lb. .30½- —
Silicate, hydrated, bgs., c.l., works, lb. .06 - —
t.c.l., works lb. .06½- —
paint grade (see Wollastonite).
Stearate, ctns., c.l lb. .37 - —
l.c.l lb. .38 - .42
Sulfate (see Gypsum)
Calomel, USP, powd., dms lb. 3.42 - —
Camphene, 46° m.p., dms., incl., c.l., works lb. .15 - —
t.c.l. same basis lb. .16½- —
tanks, same basis lb. .12½- —
Chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs lb. 3.55 - —
nat., USP, powd., cs., 100-lb. lots, lb. .60 - .65
tablets, 1-oz., ½-oz., cs lb. .85 - .90

Camphor, syn., tech., 1 bbl. or more, lb. .48 - —
USP, gran., powd., bbls., 2,000-lb. lots lb .59 —
1,000-lb. lots lb .60 —
smaller lots lb .61 —
tablets, tins, 2,000-lb. lots lb .90 —
1,000-lb. lots lb .91 —
smaller lots lb .92 —
Canada balsam (see Fir balsam)
Cantharides, Chinese, cs lb 2.00 2.05
powd., bxs lb 2.25 2.30
Russian, bgs lb 4.00 4.05
powd., bxs lb 4.35 4.40
Capsicum (see Pepper, red).
Oleoresin, NF, from domestic pepper, dms lb 4.50 5.25
from African pepper, dms lb 4.35 5.00
Caraway seed, Dutch, bgs. lb. .17 —
Carbazole, 97%, bbls., ton lots, works lb 1.05 —
Carbon black (see Black, Carbon).
Dioxide, indust., wholesale, bulk, dlvd., Metropolitan area ton 73.00 -115.00
cyls., same basis lb .08 .09
solid, same basis lb. .035 .040
Disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .07 —
l.c.l., same basis lb .08½ .09
5-gal. dms., 30 dms. to c.l., same basis lb .13 —
less than 30 dms lb .16 —
tanks, dlvd. lb .0545- —

we don't call it a day...at night



Working night and day to achieve the goals set by the rubber industry, our Houston plant has compiled an enviable record during its first year and a half under Petro-Tex management.

Soon a major expansion of our facilities will provide ample supplies of butadiene for present and prospective users and also make available isomers of n-butylene 1 and n-butylene 2 for new products and markets.

We welcome an opportunity to discuss your present and future needs and our unique abilities.

BUTADIENE • n-BUTYLENE 1 • n-BUTYLENE 2

Petro-Tex

PETRO-TEX CHEMICAL CORPORATION
HOUSTON 1, TEXAS
JOINTLY OWNED BY
TENNESSEE GAS TRANSMISSION COMPANY AND FOOD MACHINERY AND CHEMICAL CORPORATION

Carbon Tetrachloride—Coaltar

Carbon tetrachloride, CP, consumers, dms., l.c.l., frt. alld	lb.	.12¼-	.14½
tech. consumers dms. c.l., frt. alld	lb.	.11¼-	—
l.c.l., frt. alld	lb.	.13½-	—
tanks, frt. alld	lb.	.10 -	—
Carboxymethyl cellulose (see CMC).			
Carbromal NF dms. 100-lb lots, works	lb	4.00	4.25
smaller lots, works	lb	4.10	4.75
Cardamom seed, bleached "A"	lb	3.20 -	—
"B"	lb	3.10 -	—
decorticated, Ceylon, cs.	lb	3.00 -	—
Guatemalan, cs.	lb	2.85 -	—
green, Alleppey, bgs.	lb.	2.15 -	—
Ceylon, bgs	lb.	2.15 -	—
Carmine No 40, NF, bulk, 100-lb lots or more, dlvd	lb.	16.80 -	—
smaller lots, dlvd	lb.	16.90	-17.30
Carotene tech., 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram.		.295 -	—
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units.		.12 -	—
microcrystalline in oil, 400,000 A units per gram dms. dlvd. million units.		.21 -	—
b-Carotene, pure, crystalline, 1,600,000 A units to 1,670,000 per gram., cns gram.		.35 -	—
in vegetable oil, 400,000 A units per gram cns. gram		.084 -	—
Carvol, bots	lb	4.50	8.00
Cascara sagrada bark, bulk	lb.	.33 -	—
Casein, dom., acid precip., standard, bgs., 10,000-lb. lots or more, shipt. point	lb.	.32	Nom.
premium, bgs., 10,000-lb. lots or more, shipt. point	lb.	.38	Nom.
imp., acid-precip., grd., Argentine, bgs., c.l., duty paid	lb.	.25 -	.25½
New Zealand, duty paid	lb.	.24 -	.25
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J	lb.	.22 -	—
ton lots, same basis	lb.	.23 -	—
dm. lots same basis	lb.	.25 -	—
Cassia, Batavia, "A," bls.	lb.	.22 -	—
"B"	lb.	.21 -	—
"C"	lb.	.20 -	—
Corinje "A"	lb.	.22 -	—
"B"	lb.	.21 -	—
"C"	lb.	.20 -	—
Castor beans, bgs., f.o.b. Brazil	ton.	170.00	Nom.
Oil (see Oil, castor)			
Pomace, bgs., c.l., works	ton.	35.00	40.00
Castoreum, nat., cns	lb	5.25	-30.00
syn., cns	lb	9.00	—
Catechol, CP, cryst., fib dms., works	lb.	2.17½-	—
resub., dms., works	lb.	4.29½-	—
Catnip leaves, Southern, bls	lb.	.75 -	—
Celery seed, French, bgs.	lb.	.41 -	—
Indian, bgs.	lb.	.19 -	—
Cellulose acetate, flake, powd., ctns., bgs., 100-lb lots or more, dlvd E	lb.	.35 -	.46
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E	lb.	.545 -	.555
27% butyryl content, bgs., dlvd. E	lb.	.595	.605
38% butyryl content, bgs., dlvd. E	lb.	.545	.555
50% butyryl content, bgs., dlvd E	lb.	.585	.595
half-second, bgs. dlvd. E.	lb.	.545 -	.555
Scrap (see Pyroxylin scrap).			
Cerium chloride dms. dlvd.	lb.	.35 -	—
Hydrate 74% CeO_2, fib dms., 100-lb. lots or more	lb.	1.44 -	—
77% CeO_2, fib dms., 100-lb. lots or more	lb.	1.74 -	—
Oxalate, NF, bgs., works	lb.	1.00 -	—
Oxide, optical grade, bgs., 50-lb. lots or more, dlvd	lb	1.85	1.98
smaller lots, dlvd	lb	2.03	2.23
Chalk (see Calcium carbonate).			
Chamomile flowers, Hungarian style, cs	lb.	.78 -	—
Roman, cs.	lb.	2.00 -	—
Charcoal, activated, NF, fib, dms., c.l., works	lb.	.25 -	.32
5-ton lots, works	lb.	.26½-	.32½
smaller lots works	lb.	.27 -	.50
Bone (see Black, bone).			
Hardwood, bulk, lump, c.l., f.o.b. plant	ton.	55.00 -	—
briquets, bulk, c.l., f.o.b. plant.	ton.	75.00	-80.00
5 lb. paper bags, c.l., same basis	ton.	108.00 -	—
10 lb. paper bags, c.l., same basis	ton.	95.00	-98.00
25 lb. paper bags, c.l., same basis	ton.	82.00	-88.00
40-lb paper bgs., c.l., same basis	ton	81.00	-85.00
Charcoal, pinewood, gran., bgs., c.l., works, South	ton.	57.00 -	—
t.c.l., works South	ton.	67.00	
lump, bgs., c.l., works, South	ton	53.50	—
t.c.l., works, South	ton.	56.50	-71.00
bulk, c.l., works, South	ton.	38.00	—
t.l., works, South	ton.	41.00 -	—
Chestnut extract, Italian, solid, 60% tannin, bgs., exdock, plus duty	lb.	.09½-	—
powd., 70% tannin, bgs., exdock, plus duty	lb.	.10½-	—
Chloral tech. 94% min., dms., c.l., works	lb.	.23 -	—
t.c.l., works	lb.	.24 -	—
tanks, multiple units, 5 cars, works	lb.	.21 -	—
Hydrate, USP, 40 lb. jars, 1,000-lb. lots	lb.	1.00 -	—
500-lb lots	lb	1.03 -	—
100-lb. lots or less	lb	1.05 -	—
Chloramine T NF, bbls, works	lb	.75	1.00
Chlordan agricultural dms. c.l., frt alld	lb.	.65	—
t.c.l. 5,000 to 10,000-lb. lots, frt alld	lb.	.66 -	—
clarif., dms., c.l., frt alld	lb.	.69 -	—
t.c.l. 5,000 to 10,000-lb. lots, frt alld	lb.	.70 -	—
Chlorinated paraffin, 42%, dms., c.l., frt alld	lb.	.16¼-	—
t.c.l. same basis	lb.	.17¼-	—
70%, dms., c.l., same basis	lb.	.18¾-	—
t.c.l., same basis	lb.	.19¾-	—
Rubber 5, 10, 20 cps. ctns., c.l., works	lb.	.55 -	—
t.c.l., works	lb.	.56 -	—
125, 1,000 cps., ctns., c.l., works.	lb.	.65 -	—
t.c.l., works	lb.	.66 -	—
Chlorine, liq., cyls., c.l., works, frt equald	lb.	.10¼-	—
t.c.l. Metropolitan area	lb.	.11¾-	.13
tanks, single units, works, frt. equald 100 lbs.		3.15 -	—
multiple units, 5 cars, works, frt. equald 100 lbs		4.05 -	—
3 cars, same basis 100 lbs		4.25 -	—
2 cars, same basis 100 lbs.		5.25 -	—
1 car, same basis 100 lbs.		7.25 -	—
4-Chloro-2-aminotoluene fused, bbls.	lb.	1.45 -	—
m-Chloroaniline, dms., min. 10,000 lbs or over, frt alld	lb.	.75 -	—
less than 10,000 lbs., same basis	lb.	.80 -	—
tanks, same basis	lb.	.73 -	—
o-Chloroaniline, dms., c.l., frt. alld.	lb.	.65 -	—
t.c.l., same basis	lb.	.67 -	—
tanks, same basis	lb.	.63 -	—
p-Chloroaniline dms. c.l., frt. alld.	lb.	.77 -	—
t.c.l., same basis	lb.	.79 -	—
o-Chlorobenzaldehyde, dms., t.l., works	lb	1.05 -	—
t.t.l., works	lb	1.20 -	—
o-Chlorobenzaldehyde, dms., c.l., works	lb.	1.95 -	—
Chloroform tech. dms., c.l. dlvd. E	lb.	.18 -	—
t.c.l., same basis	lb.	.19 -	—
tanks, same basis	lb.	.17 -	—
USP, dms	lb.	.30 -	—
4-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis	lb.	.81 -	—
powd. dlvd E., 100% basis	lb.	96 -	—
4-Chloro-2-nitroaniline powd. dlvd. E	lb.	.80 -	—
o-Chlorophenol dms. c.l. frt. equald.	lb.	.37 -	—
t.c.l., same basis	lb.	.38 -	—
p-Chlorophenol, dms., c.l., frt. equald.	lb.	.37 -	—
t.c.l., same basis	lb.	.38 -	—
Chloropicrin comi. bots	lb.	1.50 -	—
cyls., 180 lbs., frt. alld	lb.	.95 -	—
100 lbs. same basis	lb.	.97 -	—
25 lbs., same basis	lb.	1.22 -	—
Choline bitartrate fib dms., frt. adjusted	lb.	1.25	1.35
Chloride fib dms., frt. adjusted.	lb.	1.25	1.35
Dihydrogen citrate, fib, dms., frt. adjusted	lb.	1.25	1.35
Chromium acetate soln., 7½%, bbls., works	lb.	.09¼-	—
cbys works	lb.	.11¼-	—
Fluoride bbls., works	lb.	.51	.52
Green (see Green, chrome).			
Oxide (see Green chromium oxide)			
Trioxide NF, bots	lb.	.82 -	.89
Yellow (see Yellow chrome).			
Cinchona bark, NF, red, broken, bgs	lb.	.35 -	.40
yellow broken bgs	lb.	.35 -	.40
Cinnamic alcohol (see Alcohol cinnamic).			
Aldehyde, cns., dms	lb.	.95 -	1.25
Cinnamon, Ceylon, No. 2, bgs	lb	.90 -	.91
"0000", bgs., afloat	lb.	1.07 -	—
Citral, bots., cns	lb	4.90 -	5.90
Citronellal, bots., dms.	lb	2.85 -	3.50
Citronellol, bots., dms.	lb.	4.30 -	4.60
Civet, artif, bots	lb.	13.75	-15.00
nat., bots	oz.	8.50	-15.00
Clay, ball dom., airfloated, bgs., c.l., Tenn	ton.	19.50 -	—
crushed shed moisture, bulk, c.l., Tenn	ton.	10.00 -	—
purif., bgs., c.l., Tenn	ton.	20.50 -	—
imp., airfloated, bgs., c.l., Atl. port	long-ton.	42.00	-45.00
lump bulk Atl port	long-ton.	27.00	-30.20
China, dom., dry-grd., airfloat. 99% 325 mesh, bgs., c.l., Georgia, works	ton.	10.00 -	—
t.c.l., Georgia, works	ton.	15.50 -	—
300 mesh., bgs., c.l., Georgia, works	ton.	13.50	-14.50
t.c.l., same basis	ton.	35.00	-36.00
imp., white, lump, bulk, c.l., ex-dock, Phila., Portland, Me.	gross ton.	20.00	-35.00
powd., bgs., c.l., ex dock	net ton.	50.00 -	—
t.c.l., ex whse	net ton.	60.00	-65.00
Clove, Madagascar, bgs	lb.	.42½-	—
Zanzibar, bgs	lb.	.47 -	—
CMC, crude, 96%, low or medium, vis. bgs., or fib dms., 23,000 lbs., dlvd. E., 100% basis	lb.	.39½-	.41
less than 23,000 lbs., dlvd. E., 100% basis	lb.	.41½-	.43
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis	lb.	.39½-	.41
t.c.l. dlvd E. 100% basis	lb	.41½-	.43
purif. high vis. (see Gum Cellulose).			
standard, low or medium vis., bgs., 23,000 lbs. or over, works, frt. alld	lb.	.55 -	—
smaller lots, same basis	lb.	.57 -	—

CMC prices W of the Rockies are 2c. per lb. lower and are on a works basis.

Coaltar, crude, resale for soins., dms., c.l., ex-whse	gal.	.255 -	—
t.c.l., ex-whse	gal.	.275 -	—
tanks, ex works	gal.	.155	.159
refd., resale, dms., c.l., ex-whse.	gal.	.2650-	.32
t.c.l. ex-whse	gal.	.2850-	.34
tanks, ex-whse	gal.	.1650-	.1760

More CARBON BISULFIDE!

Stauffer's new plant at Le Moyne, Alabama, is now producing carbon bisulfide from natural gas and sulfur.

The location in an area of enormous gas reserves provides a supply of raw materials which will tend to eliminate the instability and price fluctuations of the wood charcoal market.

The huge capacity of the new plant will assure continuance of the service for which Stauffer has long been known in the Rayon industry.

Purity meets Stauffer Standards.

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380 Madison Avenue, New York 17, N. Y.
Telephone: OXford 7-0600

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Stauffer means service

Cobalt acetate, 23.7%, dms., dlvd. lb. 1.20 - —
Carbonate 46% powd., bgs., dlvd. lb. 1.85 - —
Chloride, 24.2% Co., dms., dlvd. lb. 1.20 - —
Hydrate 60-61% Co., dms. dlvd lb 2.62 - —
Linoleate, fused, 8½% Co., dms. lb. .75¾- —
liq. 6% Co. dms lb .61 - —
Metal 97-99% kgs., ex whse lb 2.60 - —
Naphtenate, liq., 6% Co., dms., dlvd lb. 48¼- —
Nitrate, 20.1% Co., bbls., dlvd. lb. 1.00 - —
Oxide black, 72½-73½% Co., kgs lb. 1.96 - —
70-71% Co. kgs lb. 1.90 - —
Phosphate, powd. 32.1% Co., kgs. dlvd lb. 1.69 - —
Resinate, fused 3% Co. dms. lb. 29¾- —
Sulfate cryst. 21% Co., dms., dlvd lb. .79 - —
monohydrated, 33% Co., dms., dlvd lb. 1.32 - —
Tallate 6% Co. dms. dlvd lb 43¾- —
Cocaine, USP, cns. 100-oz. lots oz. 17.80 - —
Hydrochloride, cns. 100-oz lots oz. 13.75 - —
Cocillana bark, bls. lb. .25 - —
Cocoa butter, bgs lb. .65 - .68
Codeine NF cns 100-oz lots oz. 13.25 - —
Hydrochloride, cns. 100-oz. lots oz. 11.75 - —
Phosphate USP cns. 100-oz. lots oz. 10.25 - —
Sulfate USP cns. 100-oz. lots oz. 10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb .20 - .22
blue bls lb .20 - .22
Colchicine, USP, bots., cns oz. 29.00 -35.50
Colchicum root, bls lb. .35 - —
seed, bgs lb. .60 - —
Collodion USP dms lb .32½- —
flexible, dms lb. .34 - —
Colocynth, pulp, bls lb. .55 - —
Colombo root, bls lb. .15 - .16
Condurango bark, bales lb. .26 - —
Copaiba balsam, cns., dms lb. .85 - —
Copper acetate, bbls, c.l. works lb. .53 - —
l.c.l., works lb. .54 - —
Carbonate 55% bgs, c.l. works lb. .35¾- —
l.c.l., works lb. .37¾- —
Chloride, anhyd., dms., works lb. .45¼- .45¾
cryst., dihydrate, dms., works lb. .30¾- .31¼
dried, dms., works lb. .39 - .39½
Cyanide tech. bbls. 20,000-lb. lots or more lb. .77½- —
1,000-lb. lots or more lb. .78½- —
smaller lots lb. .80½- —
Gluconate, dms lb. 3.15 3.35
Hydrate, dms., c.l., frt. alld. E. of Miss. lb. .52½- —
l.c.l., same basis lb. .53 - —
Metal, electrolytic, dlvd., Valley basis lb. .36 - —
Naphthenate, liq., 8% Cu, dms., frt. alld lb. .24½- —
Nitrate tech., cryst. bbls. works. lb. .33¼- —
Oleate, solid, 9% Cu dms., works lb. .45 - —
Oxide, black, bbls., 100-2,000-lb. lots, works lb. .54 - —
red, 97% USN Type I, bbls., 100-5,000 lb. lots lb. .64½- —
90% USN Type II, bbls., 100-5,000 lots or more, works. lb. .62½- —
Oxychloride, dms., c.l., works lb. .53 - —
l.c.l., works lb. .53½- .63½
Quinolinolate tib dms lb 4.25 4.50
Resinate, precip., dms., frt. alld. lb. .31½- —
Sulfate, CP, gran., dms., works. lb. .2080- —
cryst., 99%, bgs. c.l., works. 100 lbs. 13.90 - —
l.c.l., same basis 100 lbs. 14.90 -16.90
monohydrated, 35%, dms., c.l., works 100 lbs. 23.75 - —
l.c.l., works 100 lbs. 24.50 - —
tribasic, dealers, bgs. c.l. works, frt. equald 100 lbs. 30.00 - —
l.c.l., same basis 100 lbs. 31.00 -34.00
Undecylenate dms lb 2.90 3.00
Copra, Atlantic, Gulf ports, c.i.f ton. 162.50 - —
Pacific ports, c.i.f ton. 157.50 - —
Coriander seed, Moroccan, bgs lb. .12 - —
Roumanian bgs lb. .09 - .09½
Yugoslavian bgs lb. .08½- —
Corn sugar, tanners, chipped, paper bgs., c.l. 60,000 lbs. min. 100 lbs. 7.26 - —
l.c.l. 100 lbs. 7.51 - —
Syrup, 42° non-ret. dms., c.l. 100 lbs. 7.34 - —
l.c.l. 100 lbs. 7.49 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, NNR bulk gram 3.50 3.55
Cottonseed meal, 41% bgs., Memphis ton. 57.00 -58.00
Cramp bark, NF bls lb .85 .91
Coumarin, NF, cryst. dms lb. 3.60 - —
Cream of tartar (see Potassium bitartrate).
Creosote carbonate NF bots cbys. lb 3.05 3.26
Coaltar crude tanks, works, frt. adjusted gal. .22 - —
soln. 80% tanks, works gal. .2068- —
refd., dms., c.l., works gal. .42 - .44
l.c.l., same basis gal. .53 - .55
tanks, same basis gal. .33 - .35
Wood, beachwood, cbys., dms lb. 1.60 - 1.65
hardwood NF bots, cbys lb 1.30 1.35
pinewood, dms. c.l., incl lb. .0561 - —
l.c.l., incl lb. .0634- —
N. Y. whse lb. .0745- —
tanks, works lb .0460- —
Cresol, tech. 50% below 204°C., dry above 207°C. wide distillation range, non-ret. dms., c.l., frt equald lb. .1625- —
l.c.l., same basis lb. .1675- —
tanks, same basis lb .145 - —
USP, non-ret. dms., c.l., same basis lb. .1775- —
l.c.l., same basis lb. .1825- —
tanks, same basis lb. .160 - —
m-Cresol, 95-98% dms. c.l., works. lb .60 - —
l.c.l., works lb .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .1775- —
l.c.l., same basis lb. .1825- —
tanks, same basis lb. .160 - —
2-97% 2°C. dms. c.l. frt. equald. lb. .2175- —
l.c.l. same basis lb. .2225- —
tanks, same basis lb .200 - —
o-Cresol, m.p. 30.5° C. and over, ret. dms., c.l., frt. equald. lb. .16¾- —
l.c.l., same basis lb. .17¼- —
tanks, same basis lb. .15 - —
30°-30.49° C., ret. dms., c.l., frt. equald. lb. .16¼- —
l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .14½- —
29°-29.9° C., ret. dms., c.l., frt. equald. lb. .15¾- —
l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .14 - —
25°-28.9° C., dms., c.l., frt. equald. lb. .14¾- —
l.c.l., same basis lb. .15¼- —
tanks, same basis lb. .13 - —

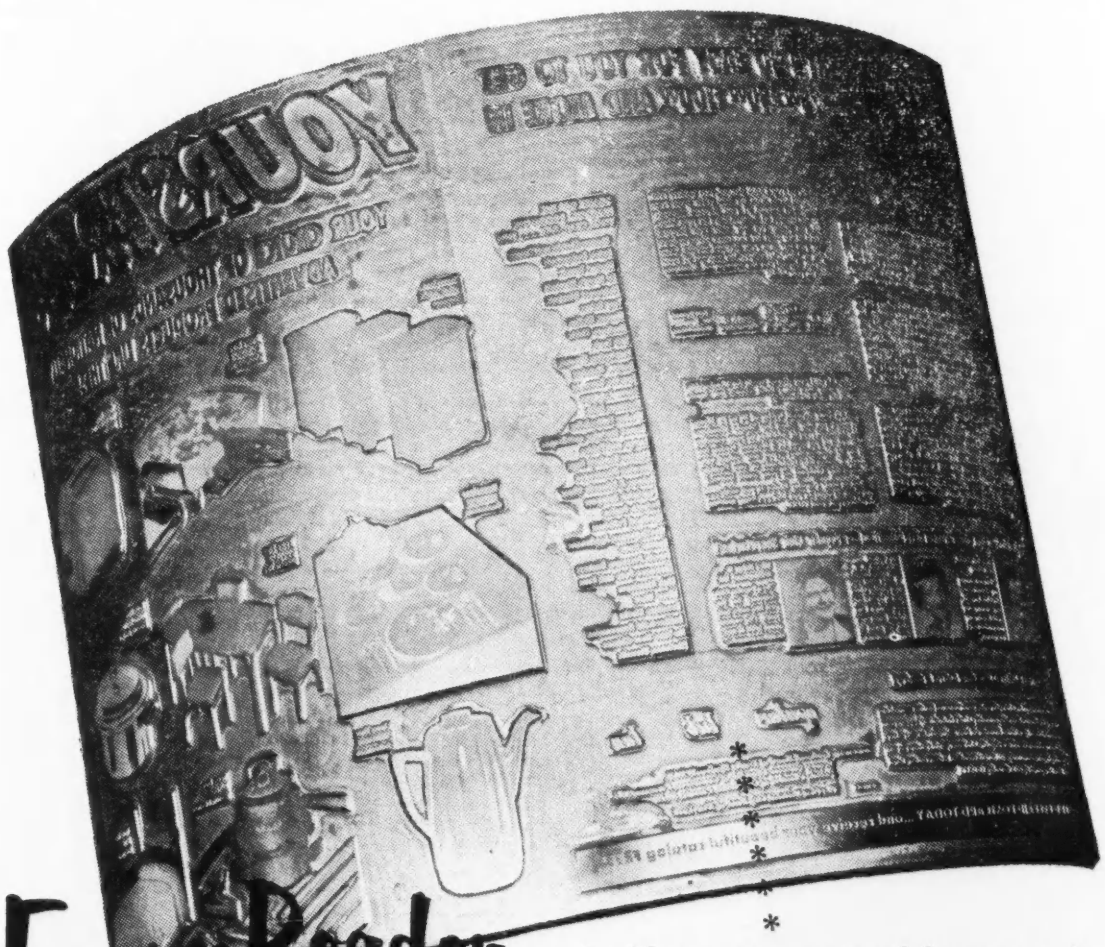
p-Cresol, 98% dms., c.l., dlvd lb. .50 - —
l.c.l., dlvd lb. .51 - —
tanks dlvd lb. .49 - —
Methyl ether, cns lb. 1.80 - 2.05
Crotonaldehyde, 91-93% dms., l.c.l. works lb 24¼ .25
Cryolite, nat., indust., bgs., c.l. works 100 lbs. 13.00 - —
l.c.l., works 100 lbs. 14.25 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l. works lb. .29 - —
Cubeb berries, XX, NF, bgs lb. .70 - —
powd., cs lb. .85 - —
Cumene, dms., c.l., works lb. .12 - —
l.c.l., works lb .14 - —
tanks, works lb .11 - —
l.c.l., works lb. .30 - —
Cumin seed, Iranian, bgs lb. .12½- .14
Moroccan, bgs lb. .22 - .23
Turkish, bgs. lb. N.P.
Cutch extract, 55% tannin bgs. ex dock duty extra lb 08½ —
Cyanamide fertilizer mixing grades, 21% N, gran. bgs. Niagara Falls, Ont. contract ton 55.00 - —
pulv. 21% N bgs works unit ton 2.75 - —
indust. grade, bgs., c.l., works ton. 75.00 - —
l.c.l., works ton. 96.00 - —
6-16 mesh, dms. c.l. works ton 120.00 - —
l.c.l., works ton. 140.00 - —
Cyclohexane, 99% tech dms. c.l., works gal .70 - —
l.c.l., works gal .72 - —
tanks, works gal .55 - —
Cyclohexanol, tech., dms. c.l., works, frt alld E lb .28 - —
l.c.l., works, same basis lb. .29 - —
tanks, works, same basis lb .24 - —
Cyclohexanone, tech., dms. c.l., works lb 32½ - —
l.c.l., works lb .35 - —
tanks, works lb .29 - —

Cyclohexene, min. 98% b.r., 82.5°C-85°C, 360 lb dms., c.l., works lb. .55 - —
l.c.l. same basis lb. .60 - —
tanks, same basis lb. .52 - —
Cyclohexylamine, dms. c.l., works lb. 46½- —
l.c.l. works lb .48½- —
tanks, works lb .45 - —
Cyclopropane, CP 2-lb cyls. works cyl 48.00 - —
6 oz cyls., works cyl 12.00 - —
USP, hospitals, cyls. 40 gal lots, gal .38 - —
100 gal lots gal .37 - —
200 gal lots gal .36 - —

D

2,4-D tech dms c.l. works, frt. equald lb .37 - —
l.c.l., same basis lb .42 .46
Butyl ester dms. c.l., works lb .40 - —
l.c.l. same basis lb .45 .49
tanks, same basis lb .39 - —
Isopropyl ester dms. c.l. works lb .40 - —
l.c.l., works lb .45 .49
tanks, works lb .39 - —
Dandelion root, bls lb .32 - —
DDD, tech., flake, grd fib dms., c.l. works lb .45 - —
l.c.l. works lb .46 - —

DDT powder bgs., c.l., works, frt. equald lb .23 - .27
smaller lots, same basis lb. .24 - .28
fib dms., c.l., same basis lb. .24 - .28
smaller lots, same basis lb. .25 - .29
1-Decanol, tech., dms. c.l., dlvd lb .41 - —
l.c.l. dlvd lb .43 - —
tanks, dlvd lb .38½- —
Deertongue leaves, bls lb. .45 - —
Defluorinated phosphate feed grade, 13% P paper bgs., c.l., t.l., works ton 49.50 - —
17%P paper bgs. c.l., t.l. works ton 58.00 - —
18% P. paper bgs., c.l., t.l. works ton. 64.10 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bag carlot prices
Degras, common, bbls lb. .10 - .12
neutral, bbls lb. .21 - .23
d-Desoxyephedrine hydrochloride, bots lb. 24.00 -25.00
dl- bots lb 6.50 - —
Dextrin, corn, gum, paper bgs., c.l. 100 lbs. 9.28 - —
l.c.l. 100 lbs. 9.43 - —
canary, dark, paper bgs., c.l. 100 lbs. 9.12 - —
l.c.l. 100 lbs. 9.27 - —
light, paper bgs., c.l. 100 lbs. 9.02 - —
l.c.l. 100 lbs. 9.17 - —
white, paper bgs., c.l. 100 lbs. 8.86 - —
l.c.l. 100 lbs. 9.01 - —
Corn dextrin in cotton bgs 15c. per 100 lbs higher
Potato, imported bgs lb 10½- .11

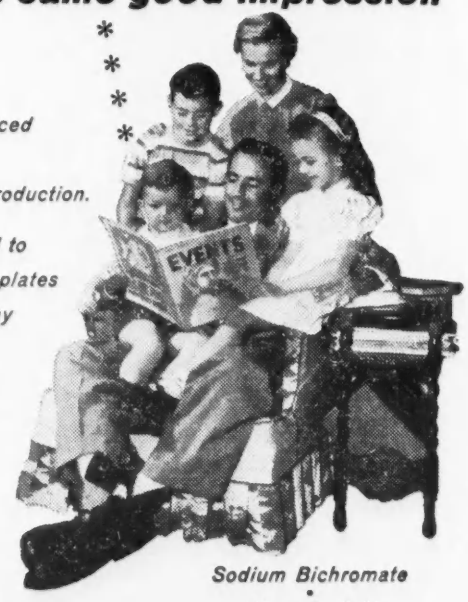


Every Reader gets the same good impression

• Magazines with circulations running in the millions are faced with a serious problem. When the type or half-tone dots wear down to the shoulder of the etch, the result is a poor reproduction.

To save press down-time in replacing worn plates, and to be sure of the same fine impression on the last part of the run, plates must have surfaces that are resistant to abrasion. That's why printers use chromium-plated letterpress plates, electrotypes and gravure rolls. Then they are certain of getting clear impressions on every sheet from the first to the last.

Chromium plating is but one of the many ways in which Mutual Chromium Chemicals contribute to better results and greater economies in the publishing industry.



Sodium Bichromate
•
Chromic Acid
•
Potassium Bichromate
•
Ammonium Bichromate

MUTUAL CHEMICAL DIVISION
ALLIED CHEMICAL & DYE CORPORATION
99 PARK AVENUE • NEW YORK 16, N. Y.

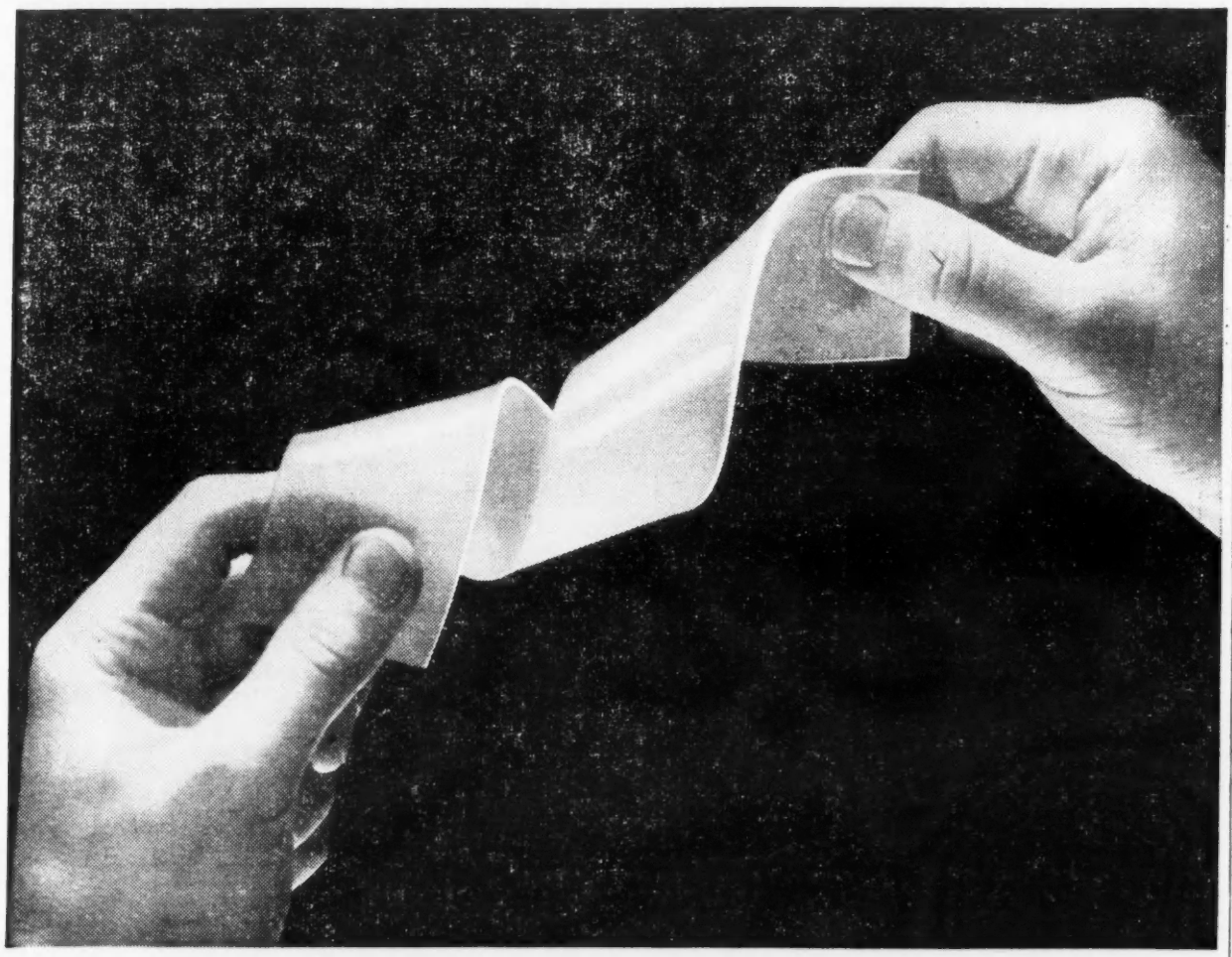
Dextrose—Dipropylene Glycol

Dextrose USP, dms ..... lb. .17¾ - —
Diacetone (see Alcohol diacetone).
Diacetyl flavor grade, bots ..... lb. 4.25 - 5.50
Di-sec-amyl phenol, dms., c.l., works ..... lb. .32 - —
l.c.l. works ..... lb. .33 - —
tanks, works ..... lb. .29½ - —
Di-tert-amyl phenol, dms., l.c., works ..... lb. .32 - —
l.c.l. works ..... lb. .33 - —
tanks, works ..... lb. .29½ - —
o-Dianisidine fib dms ..... lb 2.00 - —
Dibenzyl sebacate, dms., c.l., works, lb. .89¾ .91
l.c.l. same basis ..... lb. .90¼ .91
tanks, same basis ..... lb. .88 —
p-Dibromobenzene bgs, 500-lb. lots, lb. .55 - —
Dibutyl phthalate, dms., c.l. dlvd, E ..... lb. .32½ - —
l.c.l. same basis ..... lb. .33½ - —
tanks, same basis ..... lb. .30 - —
Sebacate, dms., c.l., works ..... lb. .66 - —
l.c.l. works ..... lb. .66½ - .67
tanks, works, dlvd ..... lb. .64 - .64¼
Tartrate dms works, frt alld ..... lb. .64 - —
Dibutylamine, dms., c.l. dlvd ..... lb. .55½ - —
l.c.l., same basis ..... lb. .56½ - —
tanks, same basis ..... lb 53 - —
2,6-Di-tert-butyl-p-cresol, food grade, dms., t.l. c.l., dlvd ..... lb. 1.20 - —
l.t.l. dlvd ..... lb. 1.24 - —
tech., dms., c.l. ..... lb. .91 - —
l.c.l. ..... lb. .95 - —
tanks ..... lb. .86 - —

Dicaprvl phthalate dms. c.l. dlvd., lb. .31 - .32
l.c.l., dlvd ..... lb. .32 - .33
tanks, dlvd ..... lb. .29½ - —
Sebacate, dms., c.l., works ..... lb. .63 - —
l.c.l. works ..... lb. .63½ - .64
tanks, works ..... lb. .61 - —
2,5-Dichloroaniline, dms., works ..... lb. .83 - —
o-Dichlorobenzene dms. c.l., frt. alld, E ..... lb. .12¼ - —
l.c.l. same basis ..... lb. .13¼ - —
tanks, same basis ..... lb. .10¾ - —
p-Dichlorobenzene dms., c.l., frt. alld E ..... lb. .14½ - —
l.c.l. same basis ..... lb. .17 - —
1,4-Dichlorobutane, dms. c.l or t.l., works ..... lb. .33½ - —
l.c.l. or t.t.l. works ..... lb. .34 - —
tanks, works ..... lb .32 - —
Dichlorodiphenyltrichlorothane (see DDT).
Dichloropentanes, dist., dms., c.l., works ..... lb. .05 - —
l.c.l. works ..... lb. .06 - —
tanks works ..... lb. .03 - —
Dicyclohexylamine dms. c.l., works, lb. .51 - —
l.c.l. works ..... lb. .51¾ - —
tanks, works ..... lb. .49½ - —
Dicyclohexyl phthalate fib dms., c.l. works, frt alld ..... lb. .58¼ .59
l.c.l. same basis ..... lb. .59¼ .60
Didecyl phthalate dms. c.l., works, lb. .34 - —
l.c.l. same basis ..... lb. .35 - —
tanks same basis ..... lb. .31½ - —
Dieldrin dms frt alld ..... lb 1.80 - —
l.c.l., frt. alld ..... lb. 1.85 - —

Diethanolamine, dms., c.l., dlvd. E, lb. .27 - —
l.c.l., same basis ..... lb. .28 - —
tanks, same basis ..... lb. .24½ - —
Diethyl carbonate, dms., c.l., frt. alld ..... lb. .47 - —
l.c.l. same basis ..... lb. .48 - —
tanks, same basis ..... lb. .45 - —
Ethanolamines, dms., c.l., dlvd. lb. .69½ - —
l.c.l., dlvd ..... lb. .70½ - —
tanks, dlvd ..... lb .67 - —
Oxalate, dms., c.l., frt. alld ..... lb. .42 - —
l.c.l. same basis ..... lb. .43 - .45
tanks same basis ..... lb. .40 - —
Phthalate, dms., c.l., dlvd ..... lb. .30 - .30½
l.c.l., dlvd. ..... lb. .31 - .31½
tanks, dlvd. ..... lb. .27½ - .28
Sulfate, dms., c.l., works ..... lb. .19 - —
l.c.l., works ..... lb. .19¾ - —
tanks, works ..... lb. .17 - —
Diethylamine, dms., c.l., dlvd. E ..... lb. .51 - —
l.c.l., same basis ..... lb. .52 - —
tanks, same basis ..... lb. .48½ - —
N,N-Diethylaniline, dms., c.l., frt. alld ..... lb. .57 - —
l.c.l., same basis ..... lb. .58 - —
tanks, same basis ..... lb. .55 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Phthalate (see Dioctyl phthalate).
Diethylene glycol, dms. c.l. dlvd E, lb. .17¾ - —
l.c.l., same basis ..... lb. .18¾ - —
tanks, same basis ..... lb. .15¼ - —
Boriborate, dms., l.c.l. ..... lb. .31 - —
Diethyl ether, dms., c.l., works, lb. .47½ - —
l.c.l., works ..... lb. .48¼ - —
Monobutyl ether, dms., c.l., dlvd, E ..... lb. .30¾ - —
l.c.l., dlvd. E ..... lb. .31¾ - —
tanks, dlvd. E ..... lb. .28¼ - —

Diethylene glycol monobutyl ether acetate, dms., c.l., works ..... lb. .30¼ - —
l.c.l., works ..... lb. .31 - —
tanks, dlvd. E ..... lb. .28¼ - —
Monoethyl ether, dms., c.l., dlvd ..... lb. .22½ - —
l.c.l., dlvd ..... lb. .23½ - —
tanks, dlvd ..... lb. .20 - —
Acetate, dms., c.l., works ..... lb. .27¼ - —
l.c.l., works ..... lb .28 - —
tanks, dlvd. E ..... lb. .25¼ - —
Monomethyl ether, dms., c.l., dlvd ..... lb. .20½ - —
l.c.l., dlvd ..... lb. .21½ - —
tanks, dlvd ..... lb. .18½ - —
Diethylenetriamine, dms., c.l., dlvd, E ..... lb. .44 - —
l.c.l., dlvd. E ..... lb. .45 - —
tanks, dlvd E ..... lb. .41½ - —
Diethylstilbestrol, USP, bots., 10-kilo lots ..... kilo. 100.00 - 147.50
1 kilo lot ..... kilo. 110.00 - 152.50
Digitalis leaves, USP, dom. dms., lb 1.20 - —
Digitoxin, USP, bots ..... gram. 4.75 - 5.25
Diglycol laurate, dms ..... lb. .32¾ - .34
Stearate, dms., ton lots ..... lb. .26 - .28
Dihexyl sebacate, dms., c.l., works, lb. .64 - —
l.c.l. works ..... lb. .64½ - .65
tanks, works ..... lb. .62 - —
Dihydrazine sulfate, dms works, lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk ..... gram. .07 - .0750
Sulfate, bulk ..... gram. .07 - .0750
1,2-Dihydroxy anthraquinone, dms., works ..... lb 2.75 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl methane, pure, dms ..... lb. 2.55 - —
tech., dms ..... lb. 1.09 - —
Di-isobutyl ketone, dms., c.l., dlvd ..... lb. .17 - —
l.c.l., dlvd ..... lb. .18 - —
tanks, dlvd ..... lb. .14½ - —
Phthalate, dms., c.l., dlvd. E ..... lb. .31½ - —
l.c.l., same basis ..... lb. .32½ - —
tanks, same basis ..... lb. .29 - —
Di-isobutylene, dms., c.l., dlvd. E, lb. .10 - —
l.c.l. dlvd. E ..... lb. .11 - —
tanks, dlvd E ..... lb. .08 - —
Di-iso-octyl pnthalate, dms., c.l., dlvd ..... lb. .31 - —
l.c.l., same basis ..... lb. .32 - —
tanks, same basis ..... lb. .23½ - —
Sebacate, dms., c.l. works ..... lb. .63½ - —
l.c.l., works ..... lb. .64½ - —
tanks, works ..... lb. .61 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼ - —
l.c.l., same basis ..... lb. .24¼ - —
tanks, same basis ..... lb. .20¾ - —
Di-isopropylamine dms., c.l., dlvd, E. of Rockies ..... lb. .50½ - —
l.c.l., same basis ..... lb. .51½ - —
tanks, same basis ..... lb. 48 - —
Dill seed, dewhiskered, bgs ..... lb. .09¼ - —
nat., bgs. ..... lb. .08 - —
Dimethyl anthranilate, cns ..... lb. 4.35 - 5.10
Chloroacetal, dms., c.l., works ..... lb. .45 - —
l.c.l. works ..... lb. .50 - —
tanks works ..... lb 40 - —
Ethanolamines, anhyd., dms., c.l., dlvd ..... lb. 1.225 - —
l.c.l., dlvd ..... lb. 1.235 - —
tanks, dlvd. ..... lb. 1.20 - —
70% dms. c.l., dlvd., 100% basis, contained amines ..... lb. .68½ - —
l.c.l., dlvd., 100% basis ..... lb. .69½ - —
tanks, dlvd. 100% basis ..... lb. .66 - —
Hydroquinone, dms. ..... lb. 2.20 - 2.25
Phthalate, dms., c.l., works ..... lb. .31 - —
l.c.l., works ..... lb. .32 - —
tanks, works ..... lb. .28½ - —
Sebacate, dms., c.l., works ..... lb. 1.275 - —
l.c.l., dlvd ..... lb. 1.285 - —
tanks, works ..... lb. 1.25 - —
Sulfate, 55-gal. ret, dms., c.l., works ..... lb. .15 - —
l.c.l. works ..... lb .16 - —
10-gal ret dms., l.c.l., works, lb. .16½ - —
Dimethylamine, 25% soln., dms., c.l., frt equald ..... lb. .42 - —
l.c.l., frt equald ..... lb. .42½ - —
tanks, frt. equald ..... lb. .33 - —
40% soln. dms. c.l., frt. equald ..... lb. .39 - —
l.c.l. frt. equald ..... lb. .39½ - —
tanks, frt. equald ..... lb. .33 - —
N,N-Dimethylaniline, dms., c.l., frt. alld ..... lb. .32 - —
l.c.l., frt. alld ..... lb. .33 - —
tanks, frt. alld ..... lb. .30 - —
N,N-Dimethylformamide dms. works, lb. .34 - .39
tanks works ..... lb. .33 - —
2,4-Dinitroaniline, dms., 1,000-lb. lots, same basis, frt. equald ..... lb. .68 - —
smaller lots, frt equald ..... lb. .71 - —
m-Dinitrobenzene, 85°C., dms ..... lb. .22 - —
89°C., dms ..... lb. .24 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E ..... lb. .15¼ - —
l.c.l., frt. alld E ..... lb. .15¾ - —
tanks, frt alld E ..... lb. .15 - —
2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms., c.l., frt. alld. E ..... lb. .20¼ - —
l.c.l. frt. alld. E ..... lb. .20¾ - —
tanks, frt. alld. E ..... lb. .20 - —
2,4-Dinitrophenol, bbls ..... lb. .37 - —
2,4-Dinitrotoluene, oily, dms ..... lb. .11 - —
refd., 63°C., dms ..... lb. .23 - —
Dioctyl adipate, dms., c.l., works, lb. .42½ - —
l.c.l., works ..... lb. .43½ - —
tanks, works ..... lb. .40 - —
Phthalate, dms., c.l., frt. alld ..... lb. .31 - —
l.c.l., frt. alld. ..... lb. .32 - —
tanks, frt. alld. ..... lb. .28½ - —
Sebacate, dms., c.l., works ..... lb. .60½ - —
l.c.l., works ..... lb. .61½ - .62¼
tanks works, dlvd ..... lb. .58 - .58½
smaller lots, frt. alld ..... lb. .63 - —
1,4-Dioxane, dms., c.l., works ..... lb. .28¾ - —
l.c.l., same basis ..... lb. .29¼ - —
tanks, same basis ..... lb. .27 - —
Dip oil (see Tar acid oil).
Dipentaerythritol, bgs., l.c.l., works, lb. .35 - —
Dipentene dest-dist., dms., c.l., works ..... gal. .47 - —
l.c.l., works ..... gal. .52 - —
ex-whse. ..... gal. .62 - —
steam-dist., dms., c.l., works, South ..... gal. .59 - —
dlvd. N. Y ..... gal. .67 - —
tanks, works, South ..... gal. .45 - —
Diphenyl, bbls., c.l., works ..... lb. .15 - —
l.c.l., works ..... lb. .16 - —
Diphenyl in bags ¼c. lower
Oxide, perfume grade, cns ..... lb. .56 - .61
Phthalate, dms., c.l., works ..... lb. .51¾ - —
l.c.l. works ..... lb. .53¾ - —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald ..... lb. .33 - —
l.c.l., works, frt. equald ..... lb. .35 - —
fused, tanks works, frt equald, lb. .31 - —
tech., fused, tanks, works, frt. equald ..... lb. .30 - —
Diphenylguanidine, bgs., dms., ton lots, frt. alld ..... lb. .52 - —
smaller lots, frt. alld. ..... lb. .53 - —
Diphenylhydantoin-sodium USP, dms ..... lb 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld ..... lb. .17¼ - —
l.c.l., same basis ..... lb. .18¼ - —
tanks, same basis ..... lb. .15¼ - —
Monomethyl ether, dms., c.l., dlvd. E ..... lb. .20 - —
l.c.l., same basis ..... lb. .21 - —
tanks, same basis ..... lb. .18½ - —



For Permanently Plasticized Copolymers . . . Rohm & Haas Acrylate Monomers

When you copolymerize Rohm & Haas acrylate monomers with vinyl chloride, vinyl acetate, vinylidene chloride, acrylonitrile, or styrene you get permanent plasticization. The primary chemical bonds which are formed mean that the acrylates cannot be extracted by even the strongest solvents and cannot migrate or volatilize.

As a result, films and coatings remain flexible longer and withstand attack by heat and ultraviolet light.

Acrylate copolymers generally require lower processing temperatures, too, forming films readily because of increased flow. Often, copolymerization with acrylate monomers may be the only plasticization necessary. External plasticizers can still be added if desired. Write for your detailed booklet.

ROHM & HAAS ACRYLATE MONOMERS

Methyl acrylate	Ethyl methacrylate
Ethyl acrylate	Hexyl methacrylate
Butyl acrylate	Decyl-octyl methacrylate
2-Ethylhexyl acrylate	Lauryl methacrylate
Methyl methacrylate	Stearyl methacrylate
Butyl methacrylate	Glacial methacrylic acid

Chemicals for Industry

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Representatives in principal foreign countries

Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .62 · —
smaller lots, frt. alld lb. .63 · —
Divi-divi, 45% tannin, bgs., bls., c.l., U. S. ports, exdock ton. 78.00 Nom.
Divinylbenzene 20-25%, dms., c.l., works, frt. equald lb. .20 · —
t.c.l., same basis lb. .21 · —
tanks, same basis lb. .19 · —
50-60% dms., c.l., works, 100% basis lb. 1.00 · —
t.c.l., works, 100% basis lb. 1.05 · —
Dodecylbenzene, dms., c.l., frt. alld lb. .14 · —
t.c.l., same basis lb. .15 · —
tanks, same basis lb. .12 · —

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:—
Blue, FD & C, No. 1 lb. 15.65 -17.60
No. 2 lb. 15.65 -17.60
Green, FD & C, No. 1 lb. 15.65 -17.60
No. 2 lb. 19.60 -22.85
No. 3 lb. 21.30 -35.90
Red, FD & C, No. 1, cns lb. 5.90 - 7.85
No. 2 lb. 3.30 - 4.10
No. 3 lb. 19.60 -22.85
No. 4 lb. 5.55 - 7.50
Violet, FD & C, No. 1, cns lb. 15.65 -17.60
Yellow, FD & C, No. 1, cns lb. 9.15 -11.05
No. 5 lb. 3.30 - 4.10
No. 6 lb. 3.30 - 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—
Black, D&C, No. 1 lb. 10.50 -10.95
Brown, D&C, No. 1 lb. 15.65 -16.10
Green, D&C, No. 5 lb. 15.65 -16.10
No. 6 lb. 15.65 -16.10
No. 7 lb. 14.35 -14.80

Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb. lots, works, 25-50 lb. lots, dlvd:—
Orange, D&C, No. 3 lb. 10.50 -10.95
No. 4 lb. 19.60 -20.05
No. 5 lb. 5.25 - 5.70
No. 17 lb. 10.50 -10.95
No. 18 lb. 23.55 -24.00
No. 19 lb. 15.00 -15.45
No. 21 lb. 3.10 - 3.60
No. 22 lb. 10.50 -10.95
No. 33 lb. 24.20 -24.65
No. 33 lb. 17.00 -17.45
Violet, D&C, No. 2 lb. 15.65 -16.10
Yellow, D&C, No. 7 lb. 10.50 -10.95
No. 8 lb. 10.50 -10.95
No. 10 lb. 13.05 -13.50
No. 11 lb. 13.05 -13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 1-lb. lots, works, 25-50 lb. lots, dlvd:—
Blue, Ext., D&C, No. 1, cns lb. 15.65 -16.10
Green, Ext., D&C, No. 1, cns lb. 15.65 -16.10
Red, Ext., D&C, No. 1, cns lb. 13.05 -13.50
Yellow, Ext., D&C, No. 1, cns lb. 10.50 -10.95

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd No.
20 Chrysoidine Y, dustless lb. .89 · —
27 Fast light, orange 2G lb. 1.09 · —
31 Phloxine 2G lb. .89 · —
36 Yellow 2G lb. 1.00 · —
40 Orange R extra, conc lb. 1.29 · —
57 Fuchsine 6B lb. 1.31 · —
79 Scarlet 2R lb. .93 · —
151 Orange AD lb. .67 · —
161 Orange RR lb. .80 · —
176 Fast red A lb. 1.18 · —
179 Rubine XX, conc lb. 1.25 · —
180 Blue F4B lb. 1.11 · —
185 Brilliant scarlet 3RU, conc. lb. 1.02 · —
202 Chrome blue black R, conc. lb. .91 · —
561 Brown B lb. 2.45 · —
581 Black EB, 200% lb. 1.13 · —
203 Chrome black T lb. .94 · —
208 Fast blue SR lb. 1.10 · —
216 Chrome red B lb. .92 · —
234 Brown Y lb. 1.08 · —
246 Blue black, extra, conc lb. 1.16 · —
275 Milling red 3R, conc lb. 1.62 · —
289 Navy blue 3R, conc lb. 1.44 · —
299 Black F, conc lb. 1.86 · —
304 Neutral black 2B, conc. lb. 2.21 · —
326 Fast scarlet 4BNC lb 1.80 · —
332 Bismark brown RX, conc., dustless lb. 1.16 · —
365 Brilliant yellow, conc lb. 3.11 · —
382 Scarlet B lb. 2.20 · —
401 Diazo black BHD lb. .79 · —
406 Blue 2B, extra conc lb. 1.30 · —
419 Red FC lb. 1.23 · —
420 Brown M lb. 1.19 · —
448 Red 4BX, conc lb. 1.43 · —
518 Diamine sky blue FF, extra, conc lb. 1.65 · —
593 Green BY, conc lb. .87 · —
596 Yellow Brown K, extra lb. 1.07 · —
620 Yellow 2G lb. 1.11 · —
639 Fast Yellow GG lb 1.97 · —
640 Yellow XX lb. 1.95 · —
655 Yellow OX lb 2.24 · —
657 Green V lb 2.31 · —
662 Brilliant green G lb 3.07 · —
667 Milling green 6B, conc lb. 4.05 · —
671 Blue EG lb. 1.68 · —
681 Crystal violet powder lb. 2.15 · —
698 Violet 6BN Powder lb. 1.91 · —
720 Brilliant blue BBG lb. 2.07 · —
729 Blue B, conc lb. 3.06 · —
749 Red BX lb. .87 · —
800 Chinoline yellow ZSS lb. 2.67 · —
860 Induline base ZM lb. 1.07 · —
860 Induline base Z2R lb. 1.07 · —
814 Yellow NN, conc lb. 3.11 · —
841 Safranine GF, extra, conc. lb. 3.48 · —
855 Nigrosine J lb. 4.76 · —
922 Blue GXX lb. 1.88 · —
978 Black GXCF, conc lb. .32 · —
1034 Alizarine red SC lb 2.85 · —
1054 Alizarine blue SAPX lb. 3.20 · —
1078 Alizarine green CG, extra. lb. 2.99 · —
1085 Alizarine blue black B lb. 2.56 · —
1096 Golden orange GFD, single paste lb. 2.19 · —
1099 Dark blue BO, single paste. lb. 1.93 · —
1101 Jade green N supra double paste lb. 1.10 · —
1108 Blue RS, double paste lb 3.26 · —
1113 Blue BLFD, double paste lb 2.48 · —
1150 Olive R, single paste lb. 1.21 · —
1151 Brown R single paste lb. 1.94 · —
1171 Indigo synthetic, 20% paste. lb. .31 · —
1217 Orange RD, double powder. lb 3.94 · —
p-4 Brown PG lb 2.54 · —
p-14 Brown EB lb 1.83 · —
p-24 Gray L lb 1.76 · —
p-80 Diazo brilliant scarlet ROAD lb 3.07 · —
p-202 Diazo black VJ, conc lb 2.10 · —
p-244 Brilliant scarlet BN lb 1.44 · —
p-313 Naphthol SWF lb 2.24 · —

Dyes, coaltar, oil soluble, 100 lb. dms., dlvd.
24 Oil orange Z-7078 lb. 1.06 · —
73 Oil scarlet ZBL lb. 1.44 · —
1073 Oil violet ZIRS lb. 6.81 · —
1078 Alizarine cyanine green base Z lb. 6.13 · —
1080 Oil violet special Z lb. 6.81 · —
Oil black ZBC lb. 4.46 · —
Oil black ZBD lb. 3.03 · —
Oil black ZHH lb. 4.61 · —
Oil black ZMM lb. 6.52 · —
Oil blue ZN lb. 8.02 · —
Oil blue ZV lb. 4.95 · —
Oil orange ZMG lb. 1.32 · —
Oil red Z-1700 lb 1.49 · —
Oil yellow ZG, conc lb. 6.33 · —

Dyes, coaltar, spirit soluble, 100 lb. dms. dlvd.
p-517 Spirit yellow ZR lb 4.62 · —
p-520 Spirit orange ZR, conc lb 5.87 · —
Spirit black ZRB lb 2.95 · —
Spirit brown ZG lb 5.30 · —
Spirit red ZB, conc lb. 6.41 · —

E

Echinacea root, bls lb. 1.10 · —
Egg albumin (see Albumin).
Yolk, dried, dom., bbls lb. 1.03 · 1.05
tanners, bbls lb. .06 · .06½
Elm bark, grinding, bls lb. .30 · .32
powd., bbls., bxs lb. .45 · —
select, bundles lb. .75 · —
Emetine hydrochloride, USP, bots oz. 48.25 -49.00
Endrin, tech., dms., dlvd., 100% basis lb 3.75 · —
Ephedrine, syn., USP, anhyd., bots, 100-oz lots oz. .98 1.00
hydrous, bots., 100-oz lots oz. .92 · —

Di-o-Tolyguanidine—Ethyl Cinnamate

Ephedrine hydrochloride, tins, 100-oz. lots oz. .75 · —
Sulfate, cryst., tins, 100-oz. lots oz. .72 · —
oz. lots oz. .72 · —
powd., tins, 100-oz lots oz. .73 · —
Epichlorohydrin, dms., c.l., dlvd lb. .35 · —
l.c.l., dlvd lb. .36 · —
tanks, dlvd lb. .33 · —
Epinephrine, syn. USP, bots, 100-gram lots gram .60 · —
Epsom salt (see Magnesium sulfate)
Ergot, NF, dms., tin-lined lb 2.00 · —
Eserine salicylate, bots oz. 72.50 -84.00
Sulfate, bots oz. 87.75 · —
Ether (see specific product)
Ethyl acetate, nat. ferment., 85-88%, dms., c.l., frt. alld lb. .14½- —
l.c.l., frt. alld lb. .15½- —
tanks, frt. alld lb. .12 · —
95-98%, dms., c.l., frt. alld. lb. .14¾- —
l.c.l., frt. alld lb. .15¾- —
tanks, frt. alld lb. .12¼- —
99%, dms., c.l., frt. alld lb. .15 · —
l.c.l., frt. alld lb. .16 · —
tanks, frt. alld lb. .12½- —
syn., 85-88%, dms., c.l., dlvd. lb. .14½- —
l.c.l., dlvd lb. .15½- —
tanks, dlvd lb. .12 · —
95-98%, dms., c.l., dlvd lb. .14¾- —
l.c.l. dlvd lb. .15¾- —
tanks, dlvd lb. .12¼- —
99%, dms., c.l., dlvd lb. .15 · —
l.c.l., dlvd lb. .16 · —
tanks, dlvd lb. .12½- —

Ethyl acetate, dms., c.l., dlvd lb. .58½- —
lb. .58½- —
l.c.l., dlvd lb. .59½- —
tanks, dlvd lb .56 · —
Acrylate, dms., c.l., t.l., dlvd. lb. .36 · —
t.t.l. dlvd lb .37 · —
tanks dlvd lb. .34 · —
Aminobenzoate, USP (see Benzocaine)
Amyl keytone, dms., c.l., dlvd lb. .20 · —
Amyl ketone, dms. c.l., dlvd lb. .20 · —
l.c.l. same basis lb .21 · —
tanks, same basis lb. .17½- —
Benzoate, bots lb. .74 .90
Bromide, tech. 98% dms., c.l., frt. alld. E lb. 42 · 44
l.c.l., frt. alld. E lb. 44 · 46
Butyl ketone, dms., c.l., works. lb. .36 · —
l.c.l., works lb. .36¾- —
tanks, works lb. .34 · —
Butyrate, works lb. .85 .90
Carbamate (see Urethane).
Cellulose vis. 7 cps., bgs., 5,000-lb. lots or more, works lb. .70 · —
smaller lots, works lb. .72 · .80
vis. 10, 20, 50, 100, 150 cps., bgs., 2,000-lb. lots or more, works lb. .65 · .70
smaller lots, works lb. .67 · .81
Chloride, tech., cyl., works .20 · .22
dms., works lb. .18 · .20
tanks, works lb. .16 · —
Cinnamate, cns lb. 3.35 · 3.45

MONTROSE
CHEMICAL COMPANY
104-112 LISTER AVENUE
NEWARK, NEW JERSEY

TETRA ETHYL ORTHO SILICATE
DI SILOXANES

Montrose new production of the highest purity Tetra Ethyl Ortho Silicate and Di Siloxanes are now available. Samples and specifications are available on request.

Highest Purity *Water Stable*
ETHYL SILICATE
Water White Acid Free
40% — 28%

Montrose Ethyl Silicates are highly stable to water and pass a rigid water stability specification which is very important for reproducible formulation also for storage and handling.

EXCLUSIVE SALES AGENTS
R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

Ethyl Ether—Glycerine

Ethyl ether, absolute, ACS, dms. lb. .27 - —
anesthesia, USP, hospitals, 1-lb. cns. lb. 1.01 - —
½-lb. cns. lb. 1.11 - —
¼-lb. cns. lb. 1.21 - —
indust., dms., c.l., dlvd. lb. .12½- —
l.c.l., dlvd. E. lb. .13½- —
tanks, dlvd. E. lb. .10 - —
Gallate, dms., 100 to 2,000-lb. lots lb. 3.90 - 4.40
Iodide, cbys., works lb. 3.30 - —
Methacrylate, dms., c.l., and less than truckload, works, frt. equald lb. .51½- .52
Morphine hydrochloride, USP, bots. oz. 11.85 - —
Nitrite (see Nitrous ether).
Oenanthate, dms. lb. 1.00 1.50
Oleate, dms., l.c.l., works lb. No prices.
Oxalate (see Diethyl oxalate)
Silicate dist. (see Tetraethyl orthosilicate).
40% available SiO_2, dms., c.l., dlvd lb. .49½- —
l.c.l., dlvd lb. .50½- —
tanks, dlvd lb. .47 - —
Ethylethanolamines, mixed, dms., c.l., dlvd. E lb. .43½- —
l.c.l., dlvd. E lb. .44½- —
tanks, dlvd. E lb. 41½- —
N-Etnyl-a-naphthylamine, dms., works, lb. 1.02 - —
N-Ethyl-o-toluidide, bbls lb. .88 - —
Ethylamine (see Mono-, Di- or Tri-)
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
l.c.l., frt. alld. lb. .58 - —
tanks, frt. alld. lb. .55 - —

Ethylbenzene, 99%, dms., c.l., or t.l., frt. equald lb. .17 - —
l.t.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
Ethylene dichloride, dms., c.l., dlvd. l.c.l., same basis lb. .11½- —
tanks, same basis lb. .12½- —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Glycol, indust., dms., c.l., dlvd. E lb. .16 - —
l.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
Monobutyl ether, dms., c.l., dlvd. E lb. .22 - —
l.c.l., dlvd. E lb. .23 - —
tanks, dlvd. E lb. .19½- —
Monoethyl ether, dms., c.l., dlvd. E lb. .21 - —
l.c.l., dlvd. E lb. .22 - —
tanks, dlvd. E lb. .18½- —
Acetate, dms., l.c., dlvd., E lb. .19½- —
l.c.l., dlvd. E lb. .20½- —
tanks, dlvd. E lb. .17 - —
Monomethyl ether, dms., c.l., dlvd. E lb. .21 - —
l.c.l., dlvd. E lb. .22 - —
tanks, dlvd. E lb. .18½- —
Acetate, dms., l.c., dlvd., E lb. .29 - —
l.c.l., dlvd. E lb. .29¾- —
tanks, dlvd. E lb. .27 - —
Monostearate, triple pressed, dms. lb. .33 - .35

Ethylene oxide, dms., c.l., dlvd. E lb. .21½- —
l.c.l., dlvd. E lb. .24½- —
tanks, dlvd. E lb. .15½- —
Trichloride (see Trichloroethane).
Ethylenediamine, 85-88%, dms., c.l., dlvd. E, 100% basis lb. .46 - —
l.c.l. dlvd. E., 100% basis lb. .47 - —
tanks, dlvd. E., 100% basis lb. .44 - —
Ethylvanillin, cns., 25-lb. lots lb 6.20 - 6.25
Eucalyptol, USP, cns., dms. lb 1.25 1.50
Eugenol, USP, bots. lb. 2.25 2.60
Euphorbia herb, bls. lb. .15 - .17

F

Feldspar, 140-200 mesh bulk, c.l., works ton 18.50 - —
Feldspar in bags $3 per ton higher
Fennel seed, Argentine, bgs. lb. .14 - —
Czech, medium, bgs. lb. .09 - —
Indian, light, bgs. lb. .15½- —
Roumanian, bgs. lb. .09 - —
Fenugreek seed, Indian, bgs. lb. .08½- .09
Moroccan, bgs. lb. .08½- .09
Ferric acetate liquor, 28°, bbls., c.l., works lb. .09 - —
l.c.l., works lb. .09¾- —
soln., USP IX, cbys. lb. .16 - —
dms. lb. 17 - —
Cacaodylate NF, bots. lb 13.00 -14.00
Chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.00 - —
l.c.l., works 100 lbs. 7.85 - —
indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
l.c.l., works 100 lbs. 5.75 - 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 8.25
sewage grade, tanks, frt. equald, 100% basis. 100 lbs. 3.50 - —
USP, cryst., dms., works lb. 07½- 09

Ferric citrate, gran., dms. lb. .86 - —
Hypophosphite, NF, dms. lb 3.45 - —
Naphthenate, liq., 6% Fe, dms., frt. alld lb. .25¾- —
Oxalate, gran., dms. lb. .85 - .87
Oxides (see oxides under Black, Brown, Red, and Yellow.)
Phosphate, NF, soluble, gran., pearls, cs lb. .64 - .65
Pyrophosphate, NF VII, soluble, powd., gran., pearls, dms., 10,000 lb. lots lb. .40½- —
Resinate 6¾% Fe, dms., frt. alld. lb. .29½- —
Stearate, dms., c.l., frt. alld lb. .37 - —
l.c.l., frt. alld lb. .38 - .42
Sulfate, partially hydrated, bgs., c.l., works ton 31.75 -33.75
l.c.l., works ton 34.75 -40.75
lb. .57 - —
Ferric-ammonium, citrate, brown, pearls, NF, gran., dms lb. .60 - .63
green, pearls, USP XII, gran., dms lb. .60 - .63
Oxalate, fine gran., dms lb. .25½- .28⅛
Ferric-potassium oxalate, fine gran., dms lb. .30½- .33⅛
Ferric-sodium oxalate, fine gran., dms lb. .25½- .28⅛
Ferrous gluconate, NF, dms lb. 94 - —
Sulfate, gran., bgs., c.l., works. ton 34.50 - —
l.c.l., dlvd., Metropolitan area 100 lbs 3.35 - 4.25
bbls., c.l., works ton 40.00 - —
bulk, c.l., works ton 27.00 - —
USP cryst., bbls., dms lb 09½- .10
Fir balsam, Canada, cns. gal. 32.00 - —
Oregon, bbls gal. 4.50 - —
Fishliver oil (see Oil fishliver)
Fishmeal, dom., menhaden, 60% protein grd. bgs., Chesapeake Bay area ton. 140.00 - —
scrap, same basis ton. 136.00 - —
Fleaseed (see Psyllium seed)
Formaldehyde, USP, 37% (inhibited), methanol Zone 1, dms., c.l., dlvd lb. .07 —
l.c.l., works lb. .0745- .075
tanks, dlvd lb. .042 - —
Zone 2, 12-15% methanol, dms. c.l. dlvd lb. .0735- —
tanks, dlvd lb. .045 - —
methanol-free (uninhibited), Zone 1, tanks, dlvd lb. .0395- —
Zone 2, tanks, dlvd lb. .042 - —
Fringetree bark, bls lb 60 .61
Fullers' earth, bgs., c.l., Ill. mines. ton 19.00 - —
powd., insecticide grade, dried, bgs., c.l., Ga. or Fla. mines ton. 17.50 - —
calcined, bgs., c.l., same basis ton 20.00 -21.75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton. 16.30 -17.00
200-mesh, bgs., c.l., same basis ton. 17.50 -18.00
spent, bgs., c.l., shipt. point ton 4.50 5.00
Furfural, dms., c.l., works lb .13 - —
l.c.l., works lb. .14 - —
tanks, dlvd. E lb. .12 - —
dlvd. W lb. .13 - —
Fusel oil, refd., dms., c.l., dlvd lb. .18 - —
l.c.l., dlvd lb. .19 - —
tanks, dlvd lb. .15½- —
Fustic extract, cryst., No. 1, bbls., l.c.l lb. .47½- —
No. 2, bbls., l.c.l lb. .45½- —
No. 3, bbls., l.c.l lb. .43½- —
liq., No. 1, bbls., l.c.l lb. .22½- —
No. 2, bbls., l.c.l lb. 21½- —
No. 3, bbls., l.c.l lb. .19 - —
solid, No. 1, bxs., l.c.l lb. .45 - —

G

G salt, bbls., frt. alld. 100% basis lb .73 - —
Gammapicoline (see g-Picoline)
Gelatin, edible, pure (pork skin), 75 Bloom test, bbls., c.l lb. .53 - —
150 Bloom test, bbl., c.l lb. .64 - —
200 Bloom test, bbls., c.l lb. .70 - —
225 Bloom test, bbls., c.l lb. .73 - —
275 Bloom test, bbl., c.l lb. .81 - —
Gelsemium root, bls lb. .26 - —
Gentian root, bls. lb. .23 - —
grd., bbls., bxs lb. .27 - —
powd., bbls., bxs lb. .27 - —
Geraniol, extra, cns., dms. lb. 3.95 - —
standard, cns., dms. lb. 3.75 - —
Geranyl acetate, cns. lb. 3.95 - —
Ginger oleoresin, NF from African root, bots lb 4.00 7.75
from Jamaican root, bots lb 6.00 -10.25
Root, African, bls. lb. .33 - —
Cochin, bgs. lb. .29 - —
Jamaican, No. 2, bgs. lb. .78 - —
No. 3 bgs. lb. .75 - —
Nigerian, split, bgs. lb. .28 - —
Glauber's salt, anhyd (see Sodium sulfate)
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd lb. .15 - —
104 jellygrams, same basis lb. .17 - —
131 jellygrams, same basis lb. .18 - —
164 jellygrams, same basis lb. .20½- —
191 jellygrams, same basis lb. .21 - —
222 jellygrams, same basis lb. .22 - —
12 green 40 jellygrams, bgs., c.l., dlvd lb. .13½- —
65 jellygrams, same basis lb. .13¾- —
80 jellygrams, same basis lb. .14 - —
115 jellygrams, same basis lb. .14½- —
135 jellygrams, same basis lb. .15 - —
164 jellygrams, same basis lb. .16 - —
180 jellygrams, same basis lb. .17 - —
200 jellygrams, same basis lb. .18½- —
Bone glue, l.c.l. prices 1c. higher.
Hide, 70-94 jellygrams., bgs., c.l., dlvd. lb. .15 - —
95-121 bgs., c.l., dlvd lb .16 - —
122-149, bgs., c.l., dlvd. lb. .18½- —
150-177, bgs., c.l., dlvd. lb. .21 - —
178-206, bgs., c.l., dlvd. lb. .23½- —
207-236, bgs., c.l., dlvd. lb. .26 - —
237-266, bgs., c.l., dlvd. lb. .28 - —
267-298, bgs., c.l., dlvd. lb. .30 - —
299-330, bgs., c.l., dlvd. lb. .32 - —
331-362 bgs., c.l., dlvd. lb. .34 - —
363-394, bgs., c.l., dlvd. lb. .36 - —
395-427, bgs., c.l., dlvd. lb. .38 - —
428-460, bgs., c.l., dlvd. lb. .40 - —
461-494, bgs., c.l., dlvd. lb. .42 - —
495-529, bgs., c.l., dlvd. lb. .43 - —
Hide glue l.c.l. prices 1c. higher.
l-Glutamine, bots gram. .65 - —
Glycerine, nat., crude, saponification, 88% to refineries, tanks lb. .16½- —
soaplye, 80% tanks lb. .15 - —
refd., CP, USP 99% dms., c.l., dlvd lb. .29¾- —
l.c.l., dlvd lb. .29⅞- —
tanks, dlvd lb. .27⅞- —
96% dms., c.l., dlvd lb. .28½- —
l.c.l., dlvd lb. .29 - —
tanks, dlvd lb. .27 - —
high gravity, dms., c.l., dlvd lb. .29¼- —
l.c.l., dlvd lb. .29¾- —
tanks, dlvd lb. .27⅝- —
nat., refd., high gravity lb. .28½- —
l.c.l., dlvd lb. .29 - —
syn., dms., c.l., dlvd lb. 29½ —
l.c.l., dlvd lb. 30 —
tanks, dlvd lb. 28 —

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FORMALDEHYDE

This informative Heyden Booklet—just off the press and ready for the process industries—contains technical information on formaldehyde which will be of value to you in your production and development work. It answers questions on physical properties, specifications, typical reactions and construction materials for storage and handling. It gives detailed facts on industrial applications in the fields of agriculture, plastics, pharmaceuticals, dyes and textiles, metals, paper, rubber, petroleum, leather, explosives.

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FINE HEYDEN CHEMICALS

HEYDEN
CHEMICAL CORPORATION
342 Madison Avenue, New York 17, New York
CHICAGO • CINCINNATI • DETROIT • LOS ANGELES • PHILADELPHIA
PROVIDENCE • SAN FRANCISCO

Benzaldehyde • Benzoic Acids • Benzyl Chloride • Beta-Oxynaphthoic Acid • Chlorotoluenes • Creosotes • Formaldehyde • Formic Acid • Guaiacols
Parahydroxybenzoates • Pentaerythritols • Propyl Gallate • Resorcinol • Salicylates • Salicylic Acid • Sodium Benzoate • Sodium Formate

Glycine (see Acid aminoacetic).
Glycerol (see Glycerine).
Glyoxal, 30%, dms., c.l., works lb. .18½- —
l.c.l., works lb. .20½- —
Golden seal root, NF, tested, bls. lb. 3.50 - —
Graphite, amorph., powd., bgs., fib. dms., ex whse lb. .06 - .09½
crystalline 88-90%, powd., bgs., fib. dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97% powd., bgs., fib. dms., ex whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No 2 90-95% bgs. fib. dms., ex whse lb .29 - .31
Grease, white, choice, all hog tanks, dlvd lb. .08½- .08¾
yellow, tanks, dlvd lb. .07⅛- .07¼
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs., works lb 5.10 - —
tungstated, PTMA kgs., works, lb 6.40 - —
Chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .40 - —
16-30% bbls. same basis lb. .40 - —
31-45% bbls. same basis lb. .41 - —
45-49% bbls., same basis lb. .44 - —
reduced color, 25%, bbls., same basis lb. .19 - —
Chrome green prices are ½c. higher, dlvd at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld. lb. 1.00 - 1.20
pure, bgs., c.l., frt. alld lb. 44¾- —
l.c.l., same basis lb. .45½- —
Dyes (see Dyes, coaltar).
Malachite straight, PTMA, bbls., works lb 4.60 - —
Paris (see Paris green).
Phthalocyanine toner, bbls., works, lb. 3.95 - —
resinated, bbls lb 3.50 - —
water dispersable, bbls lb 1.71 - —
Pigment B kegs lb 1.35 - —
paste, kegs lb .38 —
Grindelia robusta herb, bls lb .38 .40
Guaiacol NF cryst, dms., tins lb 2.10 2.15
liq., cbys., dms lb 2.30 2.40
Carbonate NF VII, dms lb 3.40 3.45
Gum, aloe (see Aloe).
Arabic, amber sorts, bgs. lb. .19 - .21
powd., USP, bbls. lb. .25 - .27
Asafetida (see A).
Asphaltum (see A).
Benzoin, Sumatra, cs lb. .33 - —
Camphor (see C).
Cellulose, high vis., bgs. 23,000-lb lots or more, works, frt alld lb. .55 - —
smaller lots, same basis lb. .57 —
Copal, Congo, No. 1, bgs. lb. .22½- .25
No. 2, bgs. lb. .18½- .20
No. 3, bgs. lb. .15¼- .17
Manila, C, bgs lb. .36½- .40
CBB, bgs. lb. No stocks.
DBB, bgs lb. .26¾- .29
DK, bgs lb No stocks.
dust, bgs lb. .14 Nom.
MA, soft, bgs lb. .18½- .21
WS, bgs lb. No stocks.
Philippine, pale, chips, bgs. lb. .21½- .24
nubs, bgs lb. .31¾- .34
seeds, bgs lb. .20 .22
sorts, bgs lb. .19¾- .22
Pontianak, chips, bgs. lb. .26 —
nubs, bgs lb. .37¾- .40
Dammar, Batavia, A/E, cs lb. No stocks.
dust, bgs lb. .16 - .18
E, bgs lb. .20 .22
East India, batu, bold, bgs lb. .13½- .15
nubs and chips, bgs lb. .08 - .09
black, bold, bgs lb. .14 - .16
unscraped, bgs. lb. .11¾- .13
nubs and chips, bgs lb. .11 - .13
pale, chips, bgs. lb. .12¾- .14
nubs, bgs lb. .17 .19
Siam, cs. lb. .36½- .39
Singapore, No. 1, bgs lb. .44¼- .46
No. 2, bgs. lb. .31¾- .33
No. 3, bgs lb. No stocks.
dust, bgs. lb. .16¾- .18
seeds, bgs lb. .20 .22
Ester, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., Mich., Mid-Atl States, N. E States, Minneapolis, N. C., Ohio, St Louis, St. Paul, Va., W Va lb. .14½- .16
wood-rosin type, dms., c.l., same basis lb. .15 .16
Guar, food grade, bgs. lb. .50 - —
tech. grade, bgs. lb. .40 - —
Karaya, No 1, NF, powd., bbls lb. .45 —
No. 2, powd., bbls. lb. .34 - .37
No. 3, powd., bbls lb. .31 - .34
Locust bean, powd., bgs. lb. .48 - .50
Myrrh, cs lb. .55 - —
Opium (see Opium).
Olibanum siftings, cs lb. .20 Nom.
tears, cs lb. .22 .30
Rosin (see Naval Stores, Protective Coatings Market).
Sterculia (see Gum Karaya).
Tragacanth No 1 ribbons, cs. lb. 4.50 - 4.70
No. 2, cs lb. 3.50 - 3.75
No. 3, cs lb. 3.25 - 3.40
powd., USP, bbls lb. 1.25 - 1.38
Gypsum, plaster of paris, 100-lb. paper bgs., trucks, dlvd. N. Y. C ton. 20.30 - —
Terra alba, dom., paper bgs., same basis ton. 20.00 - —
works, N. Y. C ton. 17.00 - —
imp., English, 100-lb. paper bgs., ex dock, N. Y. C ton. 55.00 - —
ex warehouse ton. 60.00 - 62.00

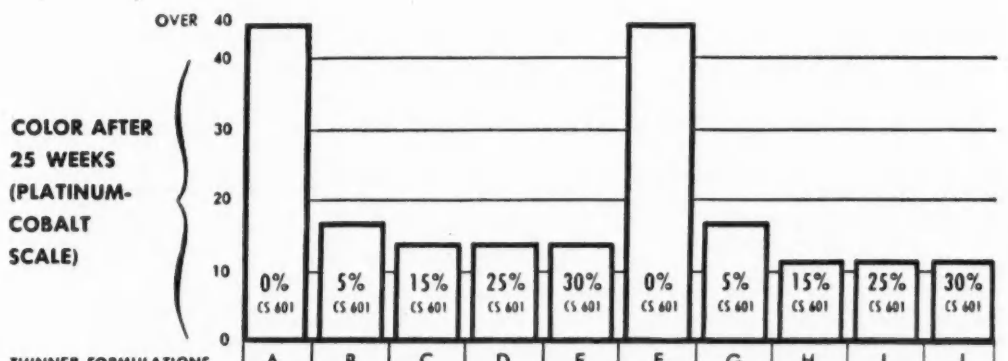
H

Hawthorn berries, bgs lb. .21 - —
Heliotropin, 100-lb. lots, dms lb. 3.00 - 3.25
Hellebore root, dom., green, bls lb. .70 - .75
Helonias root, bls lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l lb. .47 - —
No. 2, bbls., l.c.l lb. .43 - —
No. 3, bbls., l.c.l lb. .41 - —
No 4 bbls., l.c.l lb. .39 - —
No 5, bbls., l.c.l lb. .37 - —
paste, No. 1, bbls., l.c.l lb. .20½- —
Henbane leaves, bls lb. .35 - .40
Heptane, indust., tanks, Bayonne, N. J gal. .12 - —
Baytown, Tex gal. .14¼- —
Borger, Tex gal. .14¼- —
Hesperidin, purif., 25 lb. lots, f.o.b., works lb. 6.95 - —
Methylchalcone, bots., 50-lb. lots, works lb. 22.50 - —
5-lb. lots, works lb. 23.00 - —
1-lb. lots, works lb. 23.50 - —
Hexachlorophene, dms lb. 1.98 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or N.Y.C. lb. .222 - —
1,000-19,999-lb lots, same basis lb. .232 - —
smaller lots, same basis lb. .242 - —
fib dms., 1,000-lb lots or more, same basis lb. .239 - —
smaller lots same basis lb. .242 - —
USP, dms., 500-lb. lots or more, smaller lots same basis lb. .41½- —
Hexane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15½- —
Borger, Tex gal. .15½- —
1-Hexanol, dms., c.l., works lb. .35 - —
l.c.l., works lb. .35¾- —
tanks, works lb. .33 —
Hexyl cinnamic aldehyde, dms lb. 4.00 - 7.50
Salicylate, dms lb. 1.75 —
Hexylene glycol, dms., c.l., dlvd lb. .17 - —
l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14¼- —
α-Hexyl methacrylate, dms., less than truckload, works lb. .71 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb. 14.00 - —
smaller lots, dlvd lb. 44.50 - —
Homatropine hydrobromide, USP bots. oz. 5.50 - —
Methylbromide, USP, bots. oz. 3.90 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.25 - —
Horehound herb, bls lb .16 - .19
Hydrastine, bots oz. 28.75 - 29.50
Hydrochloride, NF, bots oz. 28.75 - 29.50
Hydrastis (see Goldenseal).
Hydrazine, free base, ret. dms., works lb. No stocks.
Hydrate, 85%, ret. dms., works lb. 1.35 1.55
100%, ret. dms., works lb. 1.60 1.90
Hydrocortisone acetate, bulk, bots., dms gram 4.50 - —
Alcohol, bulk, bots., dms gram 4.50 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb. .45 —
l.c.l., works lb. .55 .60
Fluoride anhyd., cyls., dlvd. E dlvd. W lb. .30½ .32½
tanks, works lb. .39 —
Peroxide, USP bbls., dlvd lb. .21 —
35%, dms., c.l., dlvd lb. .03¾- .05
l.c.l., dlvd lb. .202 —
tanks, dlvd lb. .211 —
Hydroquinone, photo grade, bbls., dms lb. .1800- —
tech., dms, c.l., dlvd lb. 1.03 - 1.06
l.c.l., dlvd lb. .82½ —
Hydroxycitronellal, cns lb. .84½- —
Hyoscine salts (see Scopolamine).
Hydrobromide, bots oz. 6.00 - 7.00
Sulfate, bots oz. 6.75 - 7.25
Hypernic extract, cryst., No 2, bbls., l.c.l lb. .52 - —
liq., No. 1, bbls., l.c.l lb. .35 - —
No 2, bbls., l.c.l lb. .27 - —

I

Ichthammol, NF, jars lb 75 2.57
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole, CP, bots lb 16.50 - 21.00
Inositol, bots., dlvd lb 5.00 —
dms., dlvd lb 4.50 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs lb. 1.10 - —
resub., USP, dms., jars lb 2.30 2.32
Iodochlorohydroxyquinolin, USP, dms lb 5.90 —
Iodoform, NF, dms., kgs lb 4.90 5.00
a-Ionone, cns lb 5.25 5.40
b-Ionone, cns lb 5.40 5.70
Ipecac root, bgs., whole lb. 7.50 - —
powd., bbls., bxs lb. 7.85 - —
Irish moss, bleached, prime, bls lb 28 .34
Iron compounds (see Ferric or Ferrous). Oxides (see under Black, Brown, Red, and Yellow).
Isoborneol, cns lb 1.25 1.70
Isobornyl acetate, cns lb. .46 .70
Formate, dms lb 80 —
Propionate, dms lb 1.15 1.45
Isobutyl acetate, perfume grade, cns lb. 75 1.00
solvent grade, dms, c.l., dlvd E of Rockies lb. .14¾- —
l.c.l., same basis lb. 15¼- —
tanks, same basis lb. .12¼- —

COMPARE THE CLARITY!



THINNER FORMULATIONS	A	B	C	D	E	F	G	H	I	J
Butyl Acetate	40	35	25	15	10	—	—	—	—	—
Methyl Isobutyl Ketone	—	—	—	—	—	40	35	25	15	10
CS 601	—	5	15	25	30	—	5	15	25	30
Isopropyl Alcohol	15	15	15	15	15	15	15	15	15	15
Toluol	25	25	25	25	25	25	25	25	25	25
Lactol Spirits	20	20	20	20	20	20	20	20	20	20

NOTE: The data above were developed by tumbling the nitrocellulose solution for a period of 25 weeks in jars containing steel balls.

CELANESE SOLVENT 601

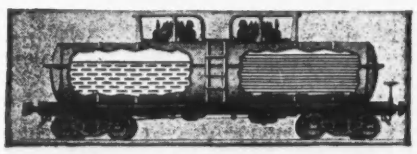
INHIBITS COLOR BUILD-UP IN NITROCELLULOSE LACQUERS

It is normal to find discoloration in lacquer solutions after contact with steel or iron surfaces. But Celanese Solvent 601 can help to prevent this condition. Tests show that the addition of economical Celanese Solvent 601, in amounts varying from 5-15% by weight of thinner, is effective in reducing lacquer discoloration due to metal corrosion . . . in many cases can eliminate the need for lined drums or tanks.

Celanese Solvent 601 is a high quality, blended solvent that is offered to meet the requirements of both vinyl and nitrocellulose formulations. In solvent power, evaporation rate and other properties Celanese Solvent 601 closely resembles methyl ethyl ketone—*although much more economical!* Ask your Celanese representative about the many advantages of Celanese Solvent 601. Write for special literature:

Celanese Corporation of America, Chemcial Division, Dept. 656-K, 180 Madison Avenue, New York 16, N. Y. Canadian affiliate: Canadian Chemical Co., Limited, Montreal, Toronto and Vancouver.

Celanese®



GET THE ECONOMY OF SPLIT SHIPMENTS

Fill all your solvent needs with Celanese compartmented tank delivery, and enjoy the advantage of bulk prices! Available from terminal points in Newark, Chicago, Bishop, Texas.

Celanese CHEMICALS

Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
t.c.l. dlvd lb. .28½- —
tech., dms., c.l., dlvd lb. .21½- —
l.c.l. dlvd lb. .22½- —
tanks dlvd lb. 19½- —
Isoeugenol ens lb 3.60 4.40
Isoniazid powd. bulk, 25-kilo lots or more kilo 23.00 25.50
smaller lots kilo 24.00 26.00
Isopentane comi. grade, tanks, f.o.b. Tex, refy gal. .15½- —
Isonicotinic acid hydrazide (see Isoniazid)
Isophorone dms., c.l., works lb. .24½- —
l.c.l. works lb. .25¼- —
tanks works lb .22½- —
Isopropanol (see Alcohol, isopropyl)
Isopropyl acetate dms., c.l., dlvd lb. .13½- —
l.c.l., same basis lb. .14½- —
tanks, same basis lb. .11 - —
Alcohol (see Alcohol, isopropyl)
Benzene (see Cumene)
Ether dms., c.l., dlvd lb 07 —
l.c.l. dlvd lb 08 - —
tanks dlvd lb 05 - —
Isopropyl-N-(3-chlorophenyl) carbamate, (CIPC), 70% in xylol, dms., c.l. t.l. works lb 70 —
l.c.l. works lb 714 .814
Isopropylamine (see Mono-, Di- or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb fib dms. c.l., t.l., works. lb 75 —
t.c.l. works lb .80 90
Isoquinoline dms., works lb .65 1.25

J

Jalap root, NF, bls lb NP - —
powd., bbls., bxs lb NP - —
Juniper berries, bgs lb .18 20
Tar, NF, dms lb .42 .60

K

Kaolin (see also Clay, China).
NF, powd. fib dms lb. .10 .12
colloidal fib. dms lb. .15½ .17½
Kola nuts, bgs lb. .15 - —

L

Lactose, edible fib dms., 30,000 lb. lots, works lb. .15 .15½
2,000-lb lots, works lb. .15¾ .16½
200-1,600-lb. lots, works lb. .16¾ .17
Edible lactose in bgs. ½-lc. lower
Fermentation grade, bgs., c.l., works lb. .09½- —
USP fib dms., 30,000-lb. lots, works lb. .21½- —
2,000-lb. lots, works lb. .22¼- —
200-1,800-lb. lots, works lb. .22¾- —
USP lactose in bgs 1c. lower.

Lanolin, cosmetic, dms., works lb. .27 - .29
USP, anhyd., dms., works lb. .25 - .27
hydrous, dms., works lb. .24 - .26
Lard, cash, dms., Chicago lb. .14 - —
Larkspur seed, bgs lb. .25 - —
n-Lauryl methacrylate, dms., c.l. or t.l. works lb. .65½- —
Lavender flowers, medium bls lb. .75 - .80
ord., bls lb. .25 - .40
select, bls lb. .90 - —
Lead acetate, white, cryst., bbls lb. .23½- —
gran., bbls lb. .24½- —
powd., bbls lb. .24½- —
NF, cryst., gran. powd lb. .32½- —
Arsenate, acid, powder, dealers, 3-lb bgs or larger, c.l., frt alld on 96 lbs or more lb. .27½- —
t.c.l., frt alld lb. .28½- —
1-lb bgs., c.l lb. .41½- —
t.c.l lb. .42½- —
Blue, basic sulfate, bbls., c.l., shipt point, frt alld lb. .17¼- —
t.c.l., same basis lb. .18¼- —
Carbonate (see Lead, white, basic carbonate).
Chloride, dms lb. .45 - —
Iodide, NF, V jars lb. 3.82 - —
Linoleate, fused 26/28% Pb, dms. lb. .33 - —
Metal, pigs, prime, N Y lb. .16 - —
St Louis lb. .1550- —
Metallic paste, dms., 20,000-40,000-lb. lots, works lb. .33¾- —
10,000-20,000-lb lots, same basis lb. .34¾- —
200-2,000-lb. lots, same basis. lb. .35¾- —
Prices ex whse Jersey City, N. J., 4½c per lb higher
Monosilicate, bgs., c.l., works, frt equald lb. .20 - —
t.c.l., same basis lb. .2075- —

Lead naphthenate, liq., 16% Pb., dms., dlvd lb. .17 - —
24% Pb. dms. dlvd lb .21 —
solid, 37% Pb., dms., dlvd lb .27½- —
Nitrate, bbls lb. .23¾- —
Orthosilicate-silica gel, 50-60% PbO dms., works lb. .29¾ .34¼
Peroxide tech., powd. bbls lb. .38¾- .40¼
Phthalate, dibasic, dms., works lb. 41 —
Red, 95% Pb_3O_4, or less, bbls., c.l., works, frt alld lb. .19 - —
t.c.l., same basis lb. .20 - —
97% Pb_3O_4, bbls. c.l., same basis lb. .192 —
t.c.l., same basis lb. .202 —
98% Pb_3O_4, bbls., c.l., same basis lb. .1935- —
t.c.l., same basis lb. .2035- —
Resinate, precip, 23% Pb, dms., dlvd lb. .32½ —
Salicylate, normal, dms works, lb. .46 —
Silicate (see Lead, white, basic, silicate)
Sulfate (see Lead, blue, basic sulfate, Lead white, basic sulfate)
Tallate, liq., 16% Pb, dms lb. .15 —
24% Pb, dms lb. .13½ —
solid, 30% lb .23¼ —
White, basic carbonate, bgs., c.l. shipt point, frt alld lb. .19 —
t.c.l., same basis lb. .20 - —
silicate, bgs., c.l., shipt, point, frt alld lb .17¼ —
t.c.l., same basis lb .18¼ —
sulfate bgs., c.l., shipt point, frt alld lb .17¼- —
t.c.l., same basis lb .18¼ —
Lecithin, edible, tech., bleached, non-ret, dms., c.l., works lb. .14 - .15
t.c.l., same basis lb. .16 - .17
unbleached, non-ret, dms., c.l., same basis lb. .13 - .14
t.c.l., same basis lb. .15 - .16
Lemon bioflavonoid complex, 25-lb lots, works lb 9.00 —
dl-Leucine, dms., works lb 12.25 15.00
Licorice root, whole, bbls lb .10 .12
gran., bbls lb. .15 - .17
powd. bbls lb .12 .15
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½ —
t.c.l., works lb. .06¾- —
Lime, chemical (quicklime), bulk, c.l., metropolitan N Y destination, freight equalized with nearest producing point ton.20.46 - —
Hydrated, bulk, c.l., same basis ton.21.96 - —
Spray, bgs., c.l., same basis ton.25.96 - —
Lime salts (see Calcium)
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite)
Limestone grd., bgs., works ton 3.50 4.00
Linalool, ex bois de rose oil, dms. lb 3.65 4.80
ex lignaloe wood oil, dms lb 5.30 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms lb 3.30 5.10
96-98%, dms lb 4.05 6.75
ex petitgrain, bots lb 4.80 5.90
Lindane, 25% formulation, dealers, dms., frt. alld lb. 1.58 - 1.68
99% tech. formulators, cms, frt. alld lb 2.65 - 2.25
Linden flowers, with leaves, bls lb .25 - —
without leaves, bls lb .30 - —
Linseed meal, expeller, 32-34% bulk Midwest, mills ton.62.50 - —
extracted, 36% bulk, same basis ton.54.00 - 55.00
Litharge, comi., powd. bbls. c.l. works, frt equald lb .18 —
l.c.l., same basis lb .19 —
Lithium benzoate, dms lb 1.65 1.67
Bromide, NF, dms. works, frt equald lb 2.45 —
Carbonate, NF, dms., c.l., t.l., dlvd lb. 1.20½- —
ton lots to t.l. dlvd lb. 1.30 —
tech., dms., c.l., t.l., dlvd., frt. alld. works lb. .82 - —
l.c.l., same basis lb .85 1.11½
Chloride, CP, anhyd., ton lots lb. 1.23½- —
tech. anhyd., dms., c.l., t.l., dlvd. or works frt. alld. lb 1.00 1.05
l.c.l. same basis lb 1.05 1.05½
Citrate, NF, dms lb 1.60 1.64
Fluoride, bbls., 10,000-lb. lots, dlvd lb 2.17½- —
ton lots, dlvd lb 2.18½- —
less ton lots, dlvd lb 2.23½- —
Hydride, powd., dms., 500-lots, works lb.10.50 12.50
Hydroxide, monohydrate, dms., c.l., t.l., dlvd or works, frt. alld lb .80 .80½
l.c.l., same basis lb .81 .81½
Manganite, dms., works lb .95 1.15
Nitrate, tech. dms. 100-lb lots. lb 1.25 —
Salicylate, dms lb 1.60 1.70
Silicate, dms., works lb. 1.10 1.30
Stearate dms., c.l works lb 47½ —
ton lots, works lb 48½ —
less-ton lots, works lb 53½ —
Sulfate, dms., 100-lb. lots lb 1.15 —
Titanate, dms, works lb 1.25 1.35
Lithopone, ord., bgs, c.l., dlvd E lb .08 —
l.c.l., dlvd E lb .08¾ —
Lobelia herb bls lb 1.50 —
Lobeline sulfate, bots, works oz.37.50 39.00
Logwood extract, cryst, No 1, bbls., l.c.l lb. 41 — —
No. 2, bbls., l.c.l lb .39 — —
liq., No. 1, bbls., l.c.l lb .20 — —
No 2, bbls., l.c.l lb .19 — —
No 3, bbls., l.c.l lb .18½- — —
solid, No 1, boxes, c.l. lb .35 — —
Lycopodium, cs lb 1.20 2.00
dl-Lysine monohydrochloride lb.12.00 - —
l-Lysine, fib, dms lb.12.00 -13.00

M

Mace, Siauw, siftings, bls lb. 2.50 2.80
West Indian, No 1, bls, shipment lb. 3.00 - —
Magnesia, calcined, tech, bgs., ctns., works lb. .25¼ .26
syn. rubber grade, light, bgs., c.l., works lb. .29¼ —
extra light, bgs, c.l., works, lb. .29¼ .30
l.c.l., works lb. .30 —
USP, light, ctns lb .35 .36
heavy, bbls. lb .45 .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt equald ton.82.50 —
dead-burnt standard grain, bulk, c.l., Chewelah, Wash ton.40.00 —
Magnesium bromide, jars lb .90 1.00
Carbonate, tech., bgs, c.l., frt. equald lb .10½ —
t.l., frt. equald lb. .11 - —
l.c.l., frt. equald lb. .12 .13

LITHIUM METAL *by the* GRAM *or* TON

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The diverse physical properties and chemical reactions of lithium metal make it a uniquely valuable research tool. Consider these provocative uses:

- Alkyl-and aryl-lithium compounds, which are prepared from lithium metal, find wide application in synthetic organic chemistry. Use of methyllithium in the preparation of synthetic Vitamin A is a typical example.
- Lithium metal as a direct reducing agent now suggests an interesting potential.
- The polymerization of isoprene to "natural" rubber thru the catalytic medium of lithium metal dispersions is a new development.
- The military and peacetime uses of lithium metal in the field of heat transfer show great promise. Based on its low density, high heat capacity and high heat of fusion, lithium has no equal as a liquid metal coolant.
- Lithium metal is the starting material for the production of lithium hydride and, in turn, lithium amide and lithium aluminum hydride.
- Rocket and guided missile propellants utilize metallic "super-fuels." Many rely on complex compounds containing lithium metal or hydride. The key: lithium's tremendous reactivity.

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BRANCH SALES OFFICES: New York • Pittsburgh • Chicago • MINES: Keystone, Custer, Hill City, South Dakota • Bessemer City, North Carolina • Cat Lake, Manitoba • Amos Area, Quebec • PLANTS: St. Louis Park, Minnesota • Bessemer City, North Carolina • RESEARCH LABORATORY: St. Louis Park, Minn.

Magnesium carbonate, USP, bgs., c.l., frt. equald ..lb. .12½ - —
t.l., frt. equald ..... lb. .13 — —
l.c.l. frt equald ..... lb .14 .15
Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points.
Chloride, anhyd., 92% flake or pebble, dms., c.l., works lb. .12¾ - —
l.c.l., works .....ton.65.00 - 80.00
Gluconate, dms., cns ..... lb. 1.34 - 1.41
Hydroxide NF, medicinal, bbls., dms., kgs lb. .24½ .30
Metal, 99.8% ingots, 10,000 lb. lots or more, works ..... lb. .36 • —
pigs, 10,000-lb. lots or more, works lb. .35¼ - —
sticks, cs., works, frt. alld. on carlots lb. .59 - —
Oxide (see Magnesia, calcined).
Nitrate, cryst., dms., works lb. .29 - —
Peroxide, 15% dms. works lb 1.00 1.05
Phosphate, tribasic, NF, bbls lb. .75 - —
Silicate (see Talc).
Silicofluoride, dms., works lb. .10½ - .12
Sulfate, tech. bgs. c.l. works l.c.l. same basis lb .14 - .15
hydrous, 99% flake, bgs., c.l., works ton.55.00 - —
100 lbs 2.15 - —
l.c.l. works 100 lbs 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 • —
l.c.l. 5,000 lbs., 1 withdrawal 100 lbs. 3.10 • —
smaller lots 100 lbs 3.35 • —
Trisilicate USP, dms., 5,000-lb. lots lb. .38 • —
1,000-lb lots ..... lb. .40 • —
100-lb lots ..... lb. .45 • —
Bulky and super grades of magnesium trisilicate 7c. per lb. higher
Malathion dms., c.l., works ... lb. .90 - —
l.c.l., works ..... lb. .92 1.02
Maleic anhydride, dms. c.l. dlvd. E lb. .27 - .28½
l.c.l., dlvd, E ..... lb. .28 - .29½
tanks, dlvd, E ..... lb. .26 - .27½
Prices on maleic anhydride W. of Rockies, 1½c. higher.
Mandrake root bls ..... lb. .55 .60
Manganese acetate bbls. dlvd lb. .35 - —
Arsenate, bgs ..... lb. .16 - —
Borate, tech., fib dms ..... lb. .25 - —
Carbonate bbls. works lb. .22 - —
Chloride, anhyd., dms. works lb. .25½ - —
Dioxide, African, 84-87%, 40,000 to 99,999-lb. lots, burlap paper lined, bgs., gross for net, works, ton.102.00 - —
paper bgs., works ton 96.50 - —
dms., works ton.106.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb lots $3 per ton higher
Gluconate, dms ..... lb. 1.50 - 1.94
Hydrate bbls, dlvd lb 36 - —
Hypophosphite NF, dms lb 3.52 - —
Linoleate, liq., 4.35% Mp. dms lb. .32½ - —
solid precip. 8.2% Mn bbls lb. .37½ - —
Naphthenate liq. 6% Mn., dms., frt alld lb. .27 - —
Resinate fused 3½% Mn. dms. lb. .24 - —
precip. 6½-7% Mn dms lb .28 - —
Sulfate, fertilizer grade, 65% sulfate, c.l., dlvd. S. E. ton.88.55 - —
l.c.l., dlvd. S E ..... ton.95.55 - —
Tallate 6% dms lb .24 - —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton.66.00 - —
So. American 30% tannin, c.l., ex dock ton 55.00 -58.00
Mannitol com'l, fib dms. ton lots, works lb. .60 - —
dms. to ton lots, works lb .62 - —
single dm. works lb .65 - —
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works ... lb. .30 - —
l.c.l., works ..... lb. .31 - —
Menadione USP, bots gram .014 .05
Menthol, nat., USP, Brazilian, cs lb. 6.40 - 6.50
syn. USP racemic cns lb 4.95 —
Menthyl salicylate tins lb 4.00 4.25
2-Mercaptobenzothiazole, bgs., fib dms., ton-lots works, frt. alld lb. .42 - —
less ton lots, same basis lb. .44 - —
Mercaptobenzothiazyl disulfide, bgs., fib dms. ton-lots works, frt. alld lb. .52 - —
less ton lots, same basis lb. .54 - —
Mercuric chloride NF, cryst. dms., 50-lb lots or more lb 4.98 - —
gran. or powd., dms., 50-lb. lots or more lb 4.78 - —
Cyanide, NF, VIII, powd., fib, dms. lb. 6.84 - —
Iodide red NF fib dms lb 7.72 —
Oxide, red, NF powd., fib dms lb 5.97 6.01
Yellow, tech. (see Yellow mercury oxide).
USP, fib. dms ..... lb. 6.14 - —
Mercurous chloride (see Calomel).
Iodide, yellow, NF ..... lb. 7.72 - —
Mercury, ammoniated (see White precipitate USP).
Metal, 76 lb. per flask net-flask 253.00 -255.00
Mesityl oxide, dms., c.l., dlvd ...lb. .14½ - —
l.c.l., dlvd ..... lb. .15½ - —
tanks, dlvd ..... lb. .12 • —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanitroaniline (see m-Nitroaniline).
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, nat., denaturing grade, tanks, frt. alld gal. .75 - —
syn., Zone 1, dms. c.l. dlvd. or truckload min. frt. alld. gal. .46 - —
l.c.l., same basis ... gal. .53 • —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .33 - —
4,000 gal. min., frt. alld or dlvd gal .30 - —
4,000 gal., min., works, Carteret, Camden, N. J. gal. .27½ - —
Zone 2, dms. c.l. or truckload min. frt. alld. or dlvd gal. .49 - —
l.c.l., same basis ..... gal. .56 - —
tankwagon 2,000-4,000-gal lots, min. dlvd Metropolitan areas gal .36 - —
tanks, 4,000 gal., min., frt. alld. or dlvd gal. .33 - —
Synthetic methanol zones are: —Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methenamine (see Hexamethylenetetramine).
dl-Methionine fib dms., frt. alld. 50-lb or more lb 3.50 —
feed grade 98% fib dms., same basis lb 2.65 —
Methoxychlor, 50% wettable powder, dealers dms. cs. frt alld lb .61 .64
Methyl abietate, non-ret. dms., c.l., dlvd zone 1 gl .20½ - —
l.c.l., same basis ..... lb .21 - —
Methyl abeitate, hydrogenated, non-ret. dms., c.l., dlvd. Zone 1. lb. .21 • —
l.c.l., same basis ..... lb. 21½ - —
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Acetone, nat., dms., l.c.l., E. of Miss., frt. alld. gal. .62½ - —
syn., dms., c.l. frt. alld. E gal. .63½ - —
l.c.l., frt. alld. E ..... lb. .69½ - —
tanks, frt. alld. E ..... gal. .48½ - —
Synthetic methyl acetone E territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four.
Acrylate, dms., c.l., t.l., dlvd lb. .39 • —
l.t.l., dlvd ..... lb. .40 • —
tanks, dlvd ..... lb. .37 • —
Alcohol (see Methanol).
Amyl acetate dms. c.l. dlvd E. lb. .16 • —
l.c.l. dlvd E ..... lb. .17 • —
tanks, dlvd E ..... lb. .13½ - —
Ketone, dms., works ..... lb 1.05 - —
Anthranilate, cns ..... lb. 2.35 - 2.63
Benzoate, cns., dms ..... lb. .60 - .75
Bromide, jobbers cyls., various sizes, frt alld E lb. .47 - .61
Cellulose, special vis. (1,500-4,000 cps.), 50 lb. bgs, c.l., works lb. .78 • —
2,000-lb. lots and more, same basis lb. .65 • —
smaller lots, frt. alld. on 100 lbs. lb. .89 - 1.00
Methyl cellulose, standard vis. (15,400 cps.), 50-lb. bgs., c.l., frt. alld. lb. .80 • —
2,000-lb. lots and more, same basis lb. .72 • —
smaller lots, frt. alld. on 100 lbs lb. .75 • .85
Chloride, indust., cyls., frt. equald. lb. .22 • —
tanks, multi-unit, same basis, lb, .15¾ - —
single unit, same basis lb. .12 • —
refrigerator mfrs., cyls., dlvd. lb. .46 • .48
other consumers or service men, cyls., dlvd lb. .67 • —
Chloroform (see 1,1,1-tri-chloroethane).
Cinnamate, cns ..... lb. 1.55 - 1.80
Cyclohexanol, dms., c.l., works lb. .35½ - —
l.c.l. works ..... lb. .36 • —
tanks works ..... lb. .34 • —
Ethyl ketone, dms., c.l., dlvd. lb. .14½ - —
l.c.l., dlvd ..... lb. .15½ - —
tanks, dlvd ..... lb. .12 • —
Formate, refd., dms ..... lb. .35 • .40
tech., non-ret. dms., any quantity, works lb. .10 —
Heptin carbonate bots ..... lb.31.00 -42.00
p-Hydroxybenzoate fib dms lb 1.90 2.00
Ionone, standard, cns., dms. lb. 5.00 5.25
Isobutyl carbinol, dms. c.l. dlvd. lb. .16½ - —
l.c.l., dlvd ..... lb. .17½ - —
tanks, dlvd ..... lb. .14 • —
Isobutyl carbinol, ketone, dms., c.l., dlvd lb. .16½ - —
l.c.l., dlvd ..... lb. .17½ - —
tanks, dlvd ..... lb. .14 • —
Methacrylate, dms., c.l., t.l., frt. equald, with Melle, W. Va lb. .31 • —
smaller lots, same basis lb 31½ - —
tanks, same basis ..... lb 29 - —
Naphthyl ketone, cryst., cns lb. 3.00 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Roseaniline chloride, NF, fib dms., 5 lb lots lb 5.04 —
Salicylate USP cns. 500-lb lots lb. 59 —
Testosterone USP 100-gram bots. gram 68 —
2-Methylbenzylamine, dms., l.c.l, works lb. 1.25 • —
2-Methylbenzyl dimethylamine, dms., c.l., works lb. 1.89 • —
l.c.l., works ..... lb. 1.90 • —
2-Mthyl-5-ethyl pyridine, dms., c.l., works lb. .445 • —
l.c.l., works ..... lb. .45 • —
tanks, works ..... lb. .43 • —
Methylene blue, fib. dms., 100-lb lots, frt. adjusted lb 3.25 3.60
smaller lots, same basis lb 3.40 3.53
Chloride, tech., dms., c.l., dlvd. E lb. 13¼ —
l.c.l., same basis ..... lb. .16 —
tanks, same basis ..... lb. .11¾ —
b-Methylnaphthalene, 32°C. m.p., dms., works lb. 90 —

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larger production
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MAGNESIA COMPOUNDS

for
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and
chemical
applications

NEW PLANT FACILITIES provide industry with more types and volume of magnesia compounds . . . used as fillers, extenders . . . for conditioning, chemical or physical agents . . . and for many other purposes in a wide range of products. Continuing twenty years of high-quality chemical production from superlative Michigan natural brines, Michigan Chemical Corporation can now supply your added requirements for the best in magnesia compounds . . . whether your business is textiles, rubber, chemicals, refractories, insulation, ceramics or fertilizer blending.

TYPICAL ANALYSES OF MICHIGAN MAGNESIA COMPOUNDS

	No. 1 Calcined Magnesite	No. 5 Calcined Magnesite	No. 15 Calcined Magnesite	No. 30C Light Calcined Magnesia	No. 4D Extra Lt. Calcined Magnesia	Basic Magnesium Carbonate	(NF Grade) Magnesium Hydroxide	(Tech. Grade) Magnesium Hydroxide
Bulk density, weight per cubic foot	60 lb.	28 lb.	24 lb.	8½ lb.	5 lb.	5.5 lb.	15 to 25 lb.	app. 20 lb.
Ignition loss:	0.5%	1.5%	2.5%	1.9%	3.0%	56.5%	PASSES N. F. IX SPECIFICATIONS	31.4%
Chloride (as Cl):	0.08	0.1	0.2	0.25	0.25	0.1		
Analysis, ignited basis:						NOT IGNITED		NOT IGNITED
SiO_2	0.3	0.3	0.3	0.3	0.3	0.15		0.20
Fe_2O_3	0.2	0.2	0.2	0.2	0.2	0.08		0.15
AL_2O_3	0.2	0.2	0.2	0.2	0.2	0.08		0.15
CaO	1.0	1.0	1.0	1.0	1.0	0.7		0.7
Mn				0.01	0.01	0.00		
Free Moisture						1.5		2.0
Screen test: Through 200 mesh		95%		99.9%	99.9%	99.99%	99.0%	99.0%
Screen test: Through 325 mesh			99.5%	99.5%	99.5%	99.5%		

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503 Bankson Street, Saint Louis, Michigan
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QUALITY PRODUCER OF PESTMASTER* DDT AND METHYL BROMIDE AND OTHER AGRICULTURAL CHEMICALS

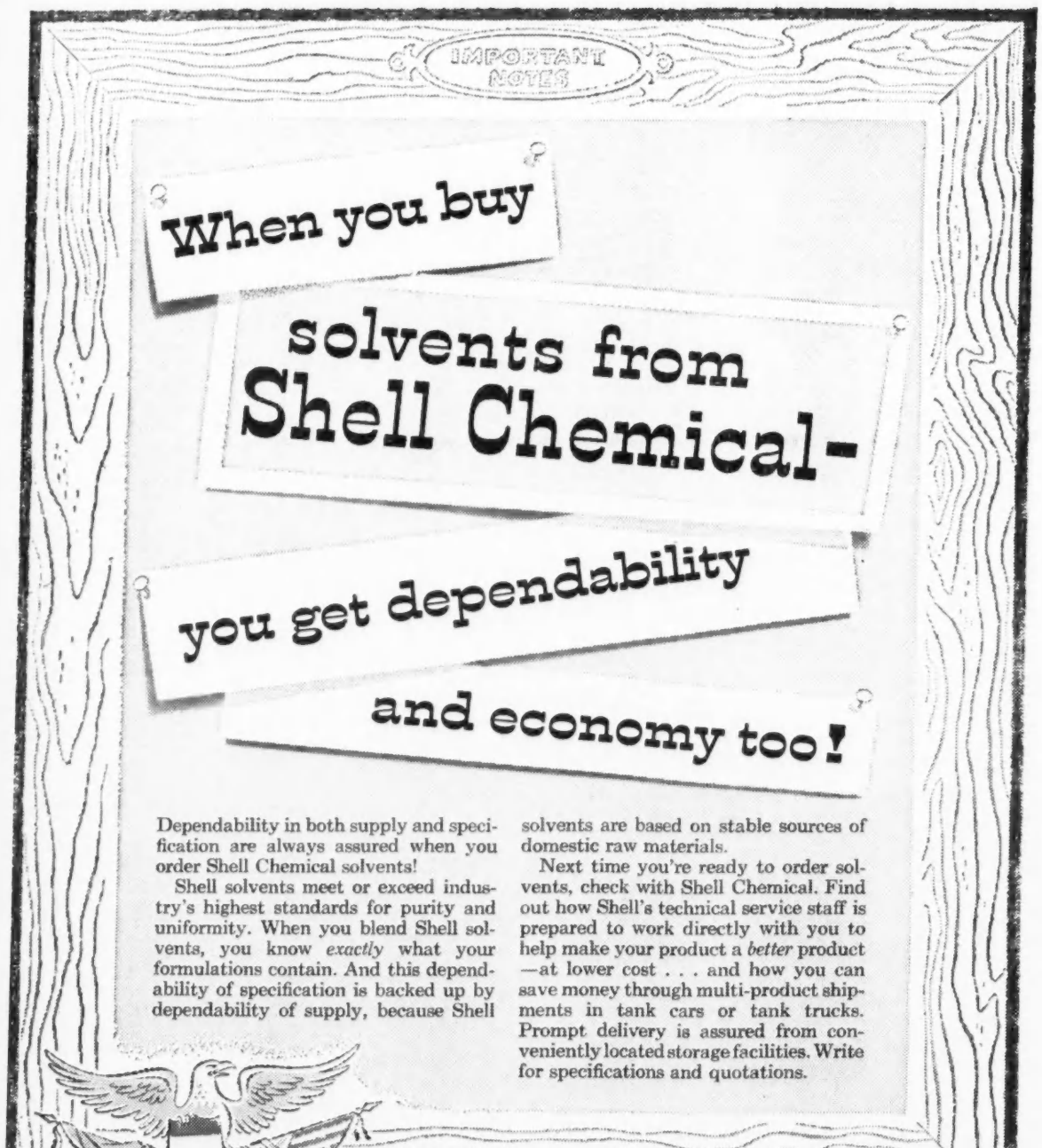
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue)
Mica, dry-grd., paint plastic, 100 mesh bgs. c.l., works lb .04 —
roofing, 20 to 80 mesh, works lb .03 —
wet-grd., biotite bgs. c.l. works, frt alld E lb .06½ —
i.c.l., ex-whse lb .07¼ —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld E lb .08¼ —
i.c.l. ex-whse or frt alld E lb .09 —
rubber, bgs., c.l., works, frt. alld, E lb. .08 • —
i.c.l. ex-whse or frt alld, E lb .08¾ —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾ —
i.c.l. ex-whse or frt alld E lb. .09 —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼ —
i.c.l. ex-whse or frt alld E lb .09 —
Mica, wet-grd. W of Miss ½c higher; W of Rockies 1c higher
Mineral spirits (see Petroleum mineral spirits)
Molasses blackstrap feed grade, tanks, New Orleans gal. .25 • .27
New York gal. .27 • —
Molybdenum (metal) powd., 80 or 200 mesh ctns works kilo 7.84 • —
325 mesh, ctns., works kilo 9.13 • —
Molybdenum trioxide, pure, dms., works lb. 1.15 • —
tech. dms., works, basis Mo. content lb. 1.39 • —
Monobutylamine, dms., c.l., E. of Rockies lb. .55½ • —
i.c.l., same basis lb. .56½ • —
tanks, same basis lb. .53 • —
Monochlorobenzene, dms., c.l., frt. alld or dlvd E lb. .10 • —
i.c.l. same basis lb. .11 • —
tanks, same basis lb. .08½ • —
Monoethanolamine, dms., c.l. dlvd. E lb. .27½ • —
i.c.l. same basis lb. .28½ • —
tanks, same basis lb. .25 • —
Monoethylalphanapthylamine (see N-Ethyl-a-naphthylamine)
Monoethylamine, 70% contained amine, dms., c.l. dlvd. E lb. .37½ • —
i.c.l., dlvd E lb. .38½ • —
tanks, dlvd E lb. .35 • —
Monoethylaniline (see N-Ethylaniline)
Monoethylorthotoluidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine dms. c.l., dlvd. E lb. .27½ • —
i.c.l., same basis lb. .28½ • —
tanks, same basis lb. .25 • —
Monoisopropylamine dms., c.l. dlvd. lb. .32½ • —
i.c.l. same basis lb. .33½ • —
tanks same basis lb .30 • —
Monomethylamine, 30-35% soln., dms., c.l. frt. equald. 100% basis. lb. .40 • —
i.c.l. frt. equald 100% basis. lb. .40½ • —
tanks frt. equald 100% basis. lb. .31 • —
Monomethylamine, 40% soln., dms., frt. equald, 100% basis. lb. .37 • —
i.c.l., frt. equald, 100% basis. lb. .37½ • —
tanks, frt. equald, 100% basis. lb. .31 • —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Glutamate (see Sodium glutamate monobasic).
Phosphate (see Sodium phosphate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol)
Morphine, cns oz. 12.40 -12.60
Acetate, anhyd., cns oz. 9.95 -10.00
Hydrobromide, cns oz. 9.90 • 9.95
Hydrochloride, NF, cns oz. 9.90 • 9.95
Sulfate, USP, cns oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd E lb. .55¼ —
i.c.l., dlvd E lb. .56¼ —
tanks, dlvd E lb. .52¾ —
Musk, syn., ambrette, 100-lb. lots, fib. dms lb. 4.45 • 5.15
25-lb. lots, cns lb. 5.05 • 5.65
5-lb. lots, cns lb. 5.20 • 5.50
ketone, 100-lb. lots, fib. dms lb. 4.70 • 5.30
25-lb lots cns lb. 5.35 • —
5-lb. lots, cns lb. 5.45 • —
xylol, 100-lb lots, fib dms lb. 1.40 • —
25-lb lots, cns lb. 1.45 • —
5-lb. lots, cns lb. 1.50 • —
Mustard seed, Danish, yellow, bgs lb. .10½ • —
Du ch, bgs. lb. .10½ • —
English, yellow, bgs. lb. .11 • —
Montana, oriental, bgs lb. .08½ Nom.
Yellow, bgs lb. .10½ • —
Myrobalans, J-1, genuine, bgs., ex-dock ton. 63.00 -64.00
crushed, bgs. ex dock ton. 79.00 -80.00
Bombay, bgs., ex dock ton. 61.00 -62.00
Extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .10 • .10¼

N

Naphtha, painters (see Petroleum naphtha V. M. & P.).
Solvent (see S)
Naphthalene, crude, dom., 74°, tanks, frt. equald lb. .06¼ —
78°, bgs., c.l., same basis lb. .07½ .08
i.c.l., same basis lb. .07¾ .08¼
tanks, same basis lb. .07 —
Imp., 78°, bgs., large lots lb. .05 Nom.
refd., indust., chipped, crushed, bgs., frt. alld lb. .12½ —
tanks, same basis lb. .11¾ —
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis, lb. .15½ —
cs., 50 lbs., c.l., same basis lb. .15¾ —
1-lb. pkgs., c.l., same basis. lb. .18½ —
a-Naphthol, bbls., frt. alld lb. 1.00 • —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 • —
i.c.l., works lb. .35 • —
Benzoate, fib. dms., works lb 3.00 • —
custom contract, works lb 1.65 • —
Salicylate, dms lb 5.00 • —
Sulfate, cns lb 35.00 • —
a-Naphthylamine, bbls., frt. alld lb 50 • —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 • —
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 • 8.00
Neomycin, fib. dms., 5 kilo lots, basis, activity gram. .45 • —
100-999 gram lots, basis, activity, gram. .55 • —
Nerolin, cns lb. 2.45 • 2.65
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd lb. .27 .90½
Carbonate bbls. dlvd lb. .73¾ .81¾
Chloride, bbls. dlvd lb. .38½ .46½
Formate, bbls., ton lots, frt. alld lb. .68 .69
Metal, electro cathodes, cs., works lb. .64½ —
Nitrate, bbls. works lb. .37 .38
Oxide, black, bbls lb. .76 —
green bbls. lb. .76 —
Sulfate, bgs., c.l., dlvd lb. .30¼ —
i.c.l., dlvd lb. .31¼ .38¼
Nicotinamide USP, dms., frt. adjusted kilo. 12.00 -12.30
Hydrochloride dms. frt. adjusted. kilo. 11.50 -11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 • —
manufacturers, 500-lb. dms., frt. alld lb. 1.05 • —
Niger seed, bgs lb. .12 • .12½
Nikethamide, cbys lb. 7.50 • —
m-Nitroaniline, cryst. dms. frt. alld. lb. 1.15 • —
paste, dms., frt. alld., 100% basis. lb. 1.10 • —
o-Nitroaniline, flaked, dms., t.l., frt. alld lb. 49 • —
t.t.l., frt. alld lb. .51 • —
p-Nitroaniline, dms., frt. alld lb. 445 • —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .14 • —
i.c.l., frt. alld lb. .15 • —
tanks, frt. alld lb. .12 • —
Nitrocellulose, ester soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 • —
i.c.l., same basis lb. .35 .37
18-25 cps. bbls., c.l., same basis lb. .36 —
i.c.l., same basis lb. .37 .39
250-400, 600-1,000 secs., bbls., c.l., same basis lb. .39 • —
i.c.l., same bassi lb. .40 • .42
spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis lb. .41 • —
i.c.l., same basis lb. .42 • .44
5-6 cps., 40-60 secs, bbls., c.l., same basis lb. .40 —
i.c.l., same basis lb. .41 • .43
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
p-Nitrochlorobenzene dms. c.l., frt. alld lb. .15 —
i.c.l., same basis lb. .16 • —
tanks, same basis lb. .13 • —
p-Nitrochlorobenzene, dms lb. .26 .27
2-Nitro-4-chlorophenol dms lb. .75 —
Nitroethane, dms., c.l., dlvd. E lb. .24 —
i.c.l., dlvd E lb. .24¾ • —
tanks, dlvd. E lb. .22½ • —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald. unit-ton. 1.14 • —
Nitrogenous process tankage, bulk, works unit-ton. 3.00 4.00
Sewage sludge, bulk, works, unit-ton. 2.95+ .50
Nitromethane, dms., c.l. dlvd. E lb. .24 • —
i.c.l., dlvd E lb. .24¾ • —
tanks dlvd. E lb. .22½ • —
Nitromethane prices West of Rockies are 1c. higher.
a-Nitronaphthalene, bbls. frt. alld. lb. .41 • —
Nitropropane-1, and -2, dms., c.l., dlvd. E lb. .22½ • —
i.c.l., dlvd. E lb. .23¼ • —
tanks, dlvd. E lb. .21 • —
Nitropropane prices West of Rockies are 1c. higher.
o-Nitrophenol, dms., works, frt. equald lb. .94 • —
p-Nitrophenol, dms., frt. alld., c.l. lb. .51 • —
i.c.l., lb. 53 • —
o-Nitrotoluene, dms., c.l., frt. alld. lb. .10 • —
i.c.l. frt. alld lb. .11 • —
tanks, frt. alld lb. .09 • —
m-Nitro-p-toluidine, dms lb. 1.59 • —
Nitrous ether cone., bots 100-lb. lots lb. 1.28 1.35
Nonyl phenol, dms., c.l., frt. alld. lb. .26½ • —
i.c.l., frt. alld lb. .27½ • —
tanks, frt. alld lb .24½ • —
Nutgalls, Aleppo, bgs lb. .36 .38
Chinese, bgs. lb. No prices.
Nutmeg, East Indian, bgs lb. .92 • —
West Indian, bgs lb. .91 • —
Nux vomica, bls lb. .10 .12
powd., bbls., bxs lb. .15 .17

O

Octane, indust., tanks, Bayonne, N. J gal. .19 • —
Baytown, Tex gal. .15¾ • —
Borger, Tex gal. .15¾ • —
1-Octanol, tech. dms., c.l., dlvd. lb. .35 • —
i.c.l. dlvd lb. .37 • —
tanks, dlvd lb. .32½ • —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Methyl Isobutyl Carbinol
Diacetone Alcohol
Secondary Butyl Alcohol
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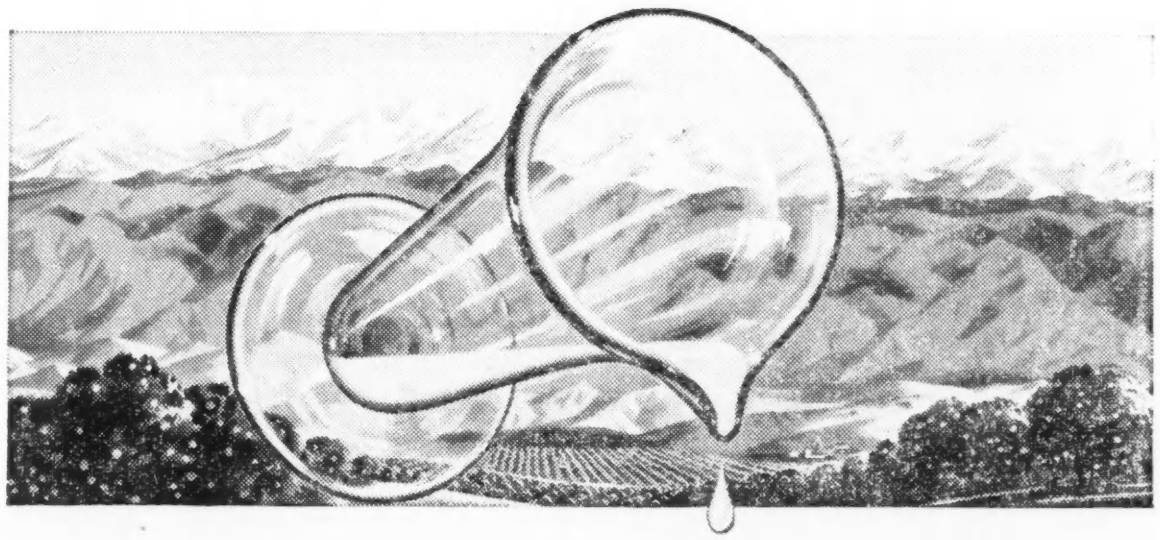
SHELL

Octyl phenol, bgs., c.l., works	lb.	.14	—
l.c.l., works	lb.	.24½	—
tanks, works	lb.	.23	—
Drum prices for octyl phenol are 11c. higher.			
(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity quality or in individual suppliers' views.)			
Oil, abies, siberica, cns.	lb.	4.00	—
Almond, artif., bitter (see Benzaldehyde).			
nat., bitter, F.P.A., bots.	lb.	3.00	3.75
NF, bots.	lb.	3.25	3.75
sweet, USP, cns., dms.	lb.	1.25	—
Allspice (see Oil, pimento).			
Amyris, dms.	lb.	1.25	—
Angelica root, bots.	lb.	66.00	-100.00
seed, bots.	lb.	56.00	-95.00
Aniline (see A).			
Anise, USP, dms.	lb.	3.50	4.00
Apricot, kernel, USP, dms.	lb.	.48	.65
Avocado, cns.	lb.	3.25	—
Bay, NF, Puerto Rican, 50-55%, cns	lb.	2.15	3.00
55-60%, cns.	lb.	2.50	3.00
West Indian, 50-55%, cns., dms.,	lb.	1.85	2.40
Bergamot, nat., NF, Italian, cns.	lb.	9.75	-11.00
Birchtar, crude, cns.	lb.	1.50	1.90
rectified, NF, cns.	lb.	1.75	—
Bois de rose, Brazil, dms.	lb.	3.70	—
Mexican (see Oil, lignaloe wood).			
Bone, dms., works	lb.	.65	.70
Cajeput, native, cns.	lb.	1.75	3.30
redist., USP, cns.	lb.	2.25	3.40
Calamus, bots.	lb.	12.00	-20.00
Camphor, sassafrassy, dms.	lb.	.30	.45
white, dms.	lb.	29	—
Cananga, native, cns.	lb.	8.50	8.75
rectified, cns.	lb.	10.00	-13.00
Caraway, NF, cns.	lb.	3.65	4.00
Capsicum (see Capsicum oleoresin).			
Cardamom, NF, bots.	lb.	38.00	-40.50
Cassia, USP (see Oil, cinnamon, USP).			
Castor, blown, dms., c.l.	lb.	.2700-	—
l.c.l.	lb.	.2800-	—
dehydrated, bodied, dms., c.l.	lb.	.2860-	—
l.c.l.	lb.	.2960-	—
tanks	lb.	.2660-	—
unbodied, dms., c.l.	lb.	.2710-	—
l.c.l.	lb.	.2810-	—
tanks	lb.	.2510-	—
hydrogenated, bgs., c.l., dlvd.	lb.	.2325-	—
l.c.l., dlvd.	lb.	.3425-	—
No. 3, tech., dms., c.l.	lb.	.2125-	—
l.c.l.	lb.	.2250-	—
tanks	lb.	.1950-	—
No. 1, Brazilian, tanks	lb.	.2050-	—
USP, dms., c.l.	lb.	.2500-	—
l.c.l.	lb.	.2600-	—
tanks	lb.	.2300-	—
sulfonated, 50%, dms., works,	lb.	.14½-	.15
75%, dms., works	lb.	.19	.19½
Cedarleaf, USP, XIII, cns., dms.	lb.	3.65	—
Cedarwood, cns., dms.	lb.	.75	1.00
Celery seed, bots.	lb.	8.00	-20.00
Chamomile blue, Hungarian, bots.	lb.	190.00	-195.00
Chenopodium, NF, cns.	lb.	4.25	4.50
Chinawood (see Oil, tung).			
Cinnamon bark, bots.	lb.	56.00	-70.00
leaf, crude, dms.	lb.	1.60	2.00
USP, cns., dms. (Cassia)	lb.	10.25	-10.90
Citronella, Ceylon, cns., dms.	lb.	.85	—
Java, cns.	lb.	1.95	—
Java-type, cns.	lb.	1.25	—
Clove, bud, USP, cns., dms.	lb.	2.65	2.90
leaf, crude, dms.	lb.	1.20	1.50
Coconut, crude, tanks, N. Y.	lb.	.12½-	—
Pac. coast	lb.	.11¼-	—
refd. Cochin type, dms., tax incl.,	lb.	.19	.19½
deodorized, tax incl., dms.	lb.	.22	.23
Cod, Newfoundland, dms.	lb.	.11½-	.11¾
Codliver, USP, dms.	gal.	1.45	1.55
Copaiba, cns.	lb.	1.75	2.50
Coriander, USP, bots.	lb.	11.75	—
Corn, crude, tanks, works	lb.	.14¾-	—
foots (soapstock), acid 95%, tanks, N. Y.	lb.	.05½-	—
refd., salad, dms.	lb.	.2034-	.2050
tanks	lb.	.18¾-	—
Costus, bots.	oz.	8.00	—
Cottonseed, crude, tanks South East	lb.	.14¾-	—
Valley	lb.	.14¼-	—
Texas, Lubbock	lb.	.14	.14⅛
Waco	lb.	.14¼-	.14⅜
foots (soapstock), acid 95%, tanks, N. Y.	lb.	.04¾-	—
refd., salad, dms.	lb.	.19¾-	.20
tanks	lb.	.17¾-	—
Creosote (see Creosote, coaltar).			
Cubeb, cns.	lb.	4.10	4.25
Cumin, bots., cns.	lb.	4.75	5.00
Cypress, bots.	lb.	5.30	—
Degras (see D).			
Dillseed, bots.	lb.	2.80	4.25
Dillweed, dom., bots., dms.	lb.	3.25	4.25
Dip (see D).			
Erigeron, cns.	lb.	5.50	7.50
Eucalyptus, NF, rect., 70-80% dms.	lb.	.62	—
80-90%, dms.	lb.	.72	—
Fennel, sweet, USP, cns.	lb.	2.85	—
Fir, Canada, cns.	lb.	4.75	—
Fish, refd., alkali, dms.	lb.	.1400-	.1450
kettle-bodied, dms.	lb.	.1630-	.1680
light-pressed, dms.	lb.	.1250-	.1300
tanks	lb.	.1100-	—
Fishliver, crude for feeds or concentrating 4,000 to 12,000 A units per gram, dms., 1,000,000 units.		.08	.09
10,000 to 20,000 A units per gram, dms., 1,000,000 units.		.09	.10
25,000 to 35,000 A units per gram, dms., 1,000,000 units.		.09	.10
40,000 to 55,000 A units per gram, dms., 1,000,000 units.		.10½-	.11
100,000 A units per gram., dms., 1,000,000 units.		.14	—
200,000 A units per gram., dms., 1,000,000 units.		.15½-	—
500,000 A units per gram., dms., 1,000,000 units.		.16	—
Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.			
Fusel (see F).			
Garlic, pure, bots.	oz.	4.75	—
Gaultheria (see Oil, wintergreen).			
Geranium, Algerian, cns.	lb.	13.50	-14.50
Bourbon, cns.	lb.	13.75	—
Turkish (see Oil palmarosa).			
Ginger, dist., bots.	lb.	18.50	-19.50
Grapefruit, dms.	lb.	1.65	—
Grease, No. 1, dms., c.l.	lb.	.15¼-	—
l.c.l.	lb.	.16¼-	.18¼
extra, winter, strained, dms., c.l.	lb.	.17¼-	—
prime, burning, dms., c.l.	lb.	.18¾-	—
l.c.l.	lb.	.19¾-	.21¼
Guaiacwood, cns.	lb.	1.60	—
Hemlock, cns.	lb.	2.10	2.30
Juniper berry, NF, VIII, bots.	lb.	2.75	4.00
twice rectified, bots.	lb.	3.60	7.00
Tar, NF (see Juniper tar).			
Wood, tech., cns.	lb.	.38	.55
Lard (see Oil, grease).			
Laurel leaf, dms., cns.	lb.	9.75	-12.50
Lavandin, dms., cns.	lb.	2.55	2.95
Oil, lavender, flower, USP, French, 35-37% ester, cns.	lb.	2.85	4.60
38-40% ester, cns.	lb.	9.25	-10.00
40-42% ester, cns.	lb.	10.00	-14.00
spike, Spanish, cns.	lb.	2.05	2.60
Lemon, USP, Calif., cns., dms.	lb.	4.25	5.00
Messina, cns.	lb.	5.75	—
terpeneless, bots.	lb.	50.00	-83.00
Lemongrass, cns., dms.	lb.	1.65	—
Lime, dist., Mexican, cns.	lb.	4.50	—
West Indian, cns.	lb.	4.50	—
expressed, West Indian, cns.	lb.	6.00	8.00
terpeneless, bots.	lb.	50.00	-83.00
Lignaloe wood, Mex., cns.	lb.	4.63	—
Linseed, raw, dms., c.l., N. Y.	lb.	.1700-	—
l.c.l.	lb.	.1800-	.1830
tanks, f.o.b. Minneapolis	lb.	.1370-	—
New York	lb.	.1500-	—
tankwagon, New York	lb.	.1530-	.1540
Boiled linseed oil, .006c. per lb higher.			
Mace, dist., cns., dms.	lb.	9.00	—
Mandarin (see Oil, tangerine).			
Menhaden, crude, tanks, works, Atlantic & Gulf	lb.	.08¾-	.09
Mineral, white (see Oil, white mineral).			
Mirbane (see Nitrobenzene).			
Mustard seed, nat., dms.	lb.	.17½	Nom.
syn., bots.	lb.	1.60	1.85
Neatsfoot, 15° cold test, dms	lb.	.30	.33
20° cold test, dms.	lb.	.29	.32
30° cold test, dms.	lb.	.28	.31
Neroli, NF, French bots.	lb.	575.00	—
Nutmeg, USP, dist., East Indian, cns., dms.	lb.	12.50	—
West Indian, cns., dms.	lb.	12.50	—
Ocotea cymbarum, dms.	lb	.50	.60
Oiticica, liq., dms.	lb.	.16¼-	.16¾
tanks	lb.	.1480-	—
Oleo, extra, dms.	lb.	.19	.19½
Olibanum, bots.	lb.	5.50	7.65
extra fine, bots.	lb.	8.00	9.00
Oil, olive, edible, Spanish, dms., duty-paid	gal.	3.30	3.40
expressed, USP, Brazilian, cns., dms	lb.	No stocks.	
Calif., cns.	dms.	.60	1.75
Florida, cns., dms.	lb.	.50	.60
Messina, cns.	lb	3.85	5.85
West Indian, cns., dms	lb	2.50	3.65
sesquiterpeneless, bots.	lb.	65.00	-120.00
Origanum, Spanish, cns.	lb	2.00	—
Palm, clarif., dms.	lb.	.1550	.1650
Palmarosa, cns.	lb.	8.25	9.00
Paraffin, pale, 100-110 vis., at 100 F. tanks, East Coast refy	gal.	.14	—
Patchouli, dms.	lb.	5.50	—
Peach kernel, USP (see Oil apricot kernel)			
Peanut, crude, tanks, f.o.b. mills.	lb.	.17¾-	.18
refd., dms.	lb.	.23½-	.24
tanks	lb.	.21½-	—
Pennyroyal, USP, imported, cns.	lb	2.75	3.50
Peppermint, nat., dms.	lb.	4.75	6.50
redist., USP, dms.	lb.	5.20	—
Persic, USP (see Oil, apricot kernel).			
Petitgrain, South American, cns., dms.		3.05	1.75
leaf, cns.	lb	2.05	2.60
Pimento, berry, NF, dms.	lb	4.50	5.00
Pine, dest.-dist., dms., l.c.l., works.	lb.	.12¼-	—
ex whse.	lb.	.14¼-	—
steam-dist., dms., ex whse. N.Y.C.	lb.	.176	—
dlvd.	lb.	.179	—
Pineneedle, Siberian (see Oil, abies siberica).			
Oil, rapeseed, tankcars	lb.	.18½-	—
Red (see Acid, oleic).			
Rice bran, clarif., dms., l.c.l	lb.	.18	Nom.
tanks, dlvd. E	lb	.15	.15½
Rose, nat., Bulgarian, bots	oz.	43.00	57.00
Rosemary, Spanish, USP, cns., dms	lb	.60	1.00
tech., cns., dms	lb	.50	.70
Rue, bots.	lb	2.00	2.50
Safflower, dms., N. Y.	lb.	.1735-	.1825
tanks, same basis	lb.	.1585-	—
Sage, clary, bots.	lb.	18.75	19.00
Dalmatian, cns.	lb	4.10	4.65
Spanish, cns.	lb	1.20	1.45
Sandalwood, NF, cns.	lb.	13.85	—
Sardine, crude tanks, Pac. coast	lb.	.08½-	.08¾
Sassafras, artif., dms.	lb.	.48	.60
nat., dom., USP, dms.	lb	1.45	2.10
imp., Brazilian (see Oil ocotea cymbarum).			
Savin, cns.	lb	2.75	—
Savory, cns.	lb	4.25	—
Sesame, refd., dms.	lb.	.33	.39
Shingle stain, tar distillate, dms., c.l., works	gal	.35	—
l.c.l., works	gal	.44	—
tanks, works	gal	.23	—
Snakeroot, Canada, cns.	lb.	27.50	31.00
Soybean, crude, tanks, Decatur.	lb.	.14½-	—
foots soapstock, acid, 95% tanks, N. Y.	lb.	.06	—
refd., alkali, dms.	lb.	.1858-	.1875
tanks	lb.	.1658-	—
clarified, dms.	lb.	.1808-	.1825
tanks	lb.	.1608-	—
salad, dms.	lb.	.1873-	.1900
tanks	lb.	.16¾-	—



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OIL OF LEMON, U.S.P.

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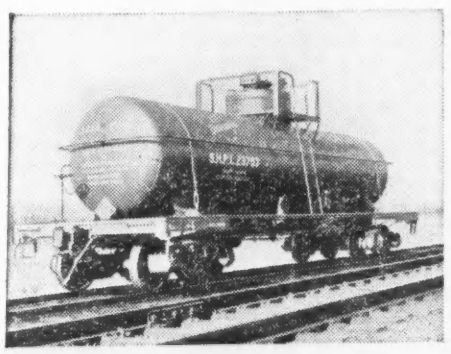
Oil, Spearmint—Petroleum

Oil, spearmint, USP, dms	lb.	4.10	- 5.00
Sperm bleached winter 45° dms	lb.	.1675-	.1725
tanks	lb.	.1590-	—
nat. winter 45° dms	lb.	.1575-	.1625
tanks	lb.	.1400-	—
Spruce, cns., dms	lb.	2.10	2.75
Sweet birch USP Northern cns.	lb.	4.25	9.50
Southern cns	lb.	2.30	2.75
Tall, crude, dms., c.l., works	lb.	.03¾-	.04¼
tanks, works	lb.	.02½	—
dist., dms. c.l., works	lb	.07½	—
l.c.l. works	lb	.07¾	—
tanks, works	lb	.06¼	—
refd., dms. c.l., works	lb	.06½	.06¾
l.c.l. works	lb	.06½	.06¾
tanks works	lb	.06¾	.07¾
Tallow, acidless, dms., c.l.	lb	.05¼	.05¾
l.c.l.	lb	.13½	—
Tangerine Floridian dms	lb	.14½	.16
Tansy dms	lb	2.00	8.80
Tar acid (see T's)	lb	7.50	8.40
Pine comm dms, c.l. works	lb	.0561-	—
l.c.l. works	lb	.0634-	—
whse	lb	.0745-	—
tanks works	lb	.046	—
rectified, NF dms, incl., l.c.l., works, South	gal	1.05	- —
ex whse, N Y C	gal	1.15	- —
refd., dms., incl., l.c.l., works	gal.	.92	- —
N Y whse	gal.	1.02	- —
Theobroma (see Cocoa butter).			

Oil, thyme, NF, red, cns., dms	lb.	1.45	- 1.75
white, cns	lb	1.70	2.00
tech white cns	lb	.40	1.85
Tung, dms., c.l., N. Y.	lb.	.25½-	—
l.c.l., same basis	lb.	.26	- .26½
tanks, N. Y.	lb.	.24	- —
domestic mills	lb.	.23	Nom.
Turkey red (see Oil, castor, sulfonated)			
Turpentine NF cns, gms.	lb	28	45
Veviter, Bourbon, cns	lb.	11.75	-11.90
Haitian, cns.	lb.	9.25	-11.00
Java cns	lb.	18.50	-20.00
Wheat, germ, 5-gal dms	gal.	11.20	- —
White mineral, tech., 50-65 vis., non-ret dms c.l., t.o.b. N Y	gal.	.55	- —
65-75 vis. non-ret dms, c.l., same basis	gal.	.56	- —
t.c.l., same basis	gal.	.61	- —
80-90 vis., non-ret dms., c.l., same basis	gal.	.57	- —
t.c.l., same basis	gal.	.62	- —
135-138 vis. non-ret. dms., c.l., same basis	gal.	.63	- —
t.c.l., same basis	gal.	.68	- —
145-155 vis. non-ret dms., c.l., same basis	gal.	.69½-	—
t.c.l., same basis	gal.	.74½-	—
USP, 180-190 vis., non-ret. dms., c.l., same basis	gal.	.71	—
t.c.l., same basis	gal.	.76	—
200-210 vs., non-ret dms., c.l., same basis	gal.	.75	- —
t.c.l., same basis	gal.	.79	- —
345-355 vis. non ret dms., c.l., same basis	gal.	.78½-	—
t.c.l., same basis	gal.	.84½-	—

Oil, wintergreen, USP, nat., Northern, cns.	lb.	6.35	- 10.30
Southern cns	lb.	3.20	-19.50
syn. (see Methyl salicylate).			
Wood (see Oil, tung).			
Wormseed (see Oil, Chenopodium, NF).			
Wormwood, cns	lb.	5.50	- 6.85
Ylang-ylang, Bourbon, bots	lb.	14.00	-16.00
extra bots	lb.	28.00	-40.00
Madagascar bots	lb	No stocks	
Oleostearine, dms	lb.	.14½-	.15
Opium, USP, cns	oz.	19.20	-19.45
gran., USP, cns	oz.	21.65	-21.90
powd USP cns	oz.	21.65	-21.90
Orange cadmium-selenide lithopone, light shade, bbls., frt. alld. E. of Rockies	lb.	1.80	- —
deep shade, bbls	lb.	2.00	- —
Cadmium-mercury lithopone, deep shade, bbls	lb.	1.78	- —
Chrome, CP, bbls., dlvd. N. of Tennessee and N.C., E. of Miss. R., include Davenport, Tenn., and E. of Minneapolis, Rock Island, St. Louis, St. Paul	lb.	.33	- .33½
Chrome orange prices are ½c. higher, dlvd. Ala., Fla., Ga., La. (Shreveport); 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.			
Dinitroaniline toner CP	lb.	1.45	- —
Mineral, American, bbls., l.c.l., works	lb.	.2235-	—
Molybdated, bbls.	lb.	.46	- .46½
o-Nitroaniline toner, kegs.	lb.	1.15	- —
Orange peel, bitter, Haitian, bls	lb.	.14	- .16
sweet, bls	lb.	.16	- .18
Orris root, Florentine, bls	lb.	.55	- —
powd., bbls., bx	lb.	.68	- —
Verona, bls.	lb.	.35	- .40
powd., bbls., bxs	lb.	.45	- —



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Story-book magic may be all right for growing beanstalks, but it takes a lot more than "abracadabra" to make a tank car fleet grow.

Among other things, it takes planning, organization and not a little vision. But above all, it calls for the kind of *dependable* service which we have been delivering for 35 years. That's why so many leaders in American industry rely on Shippers' for modern tank car service.

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As exclusive sales agent and lessor for ACF built DURADOMES, we'll be glad to help you determine the comparative advantages of rental or outright purchase. There's no obligation.

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CHICAGO, ILL. • HOUSTON, TEX. • SAN FRANCISCO, CAL. • MILTON, PA. • EAST ST. LOUIS, ILL. • CLEVELAND, OHIO • SMACKOVER, ARK. • TULSA, OKLA. • NORTH KANSAS CITY, MO. • RED HOUSE, W. VA.

Orthoaminobiphenyl (see o-Aminobiphenyl)
Orthoanisidin (see o-Anisidine)
Orthochloroanilin (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol)
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitrobiphenyl (see o-Nitrobiphenyl)
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol)
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidin (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol)
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine)

Osage orange cryst. No. 1, bbls.	l.c.l. lb.	.40	- —
extract liq. No. 1, bbls., l.c.l.,	lb.	.19	- —
Ouabain USP bots	gram.	3.00	4.00
Oxyquinolin sulfate cns. 100-lb. lots, works	lb.	4.75	5.00
smaller lots, works	lb.	4.92	5.17

P

Papain, USP, African, bots	lb	3.50	- 4.00
Ceylon	lb	3.00	3.50
Papaverine, nat. or syn. hydrochloride USP, cns., 25-oz to 100-oz. lots	oz.	5.00	—
smaller lots	oz.	5.05	5.20
Sulfate cns.	oz	7.10	7.35
Paprika, Roumanian, bgs	lb.	.26	—
Spanish, bgs	lb.	.43½-	.45
Yugoslavian, bgs.	lb.	.37	- —

Para-aminophenol (see p-Aminophenol)
Para-anisidin (see p-Anisidine)
Parachloro-orthonitroanilin (see 4-Chloro-2-nitro-
Parachloranilin (see p-Chloraniline)
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde)
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).

Paraffin, crude, scale, white, 123-127°F, ASTM, tanks, refy.	lb.	.0710-	—
fully refd., 122°-124°F, ASTM, tanks, refy	lb.	.0815-	—
125°-127°F, ASTM, tanks, refy	lb.	.0815-	—
130°-132°F, ASTM, tanks, refy	lb.	.0815-	—
132°-134°F, ASTM, tanks, refy	lb.	.0815-	—
135°-137°F, ASTM, tanks, refy.	lb.	.0815-	—

AMP temperatures are an arbitrary 3°F higher than ASTM.

Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld	lb.	.11¼-	—
l.c.l., frt. alld	lb.	.13¾-	.14¼
powd., bgs., c.l., frt. alld	lb.	.16	- —
l.c.l., frt. alld	lb.	.17½-	—
USP, X, lib. dms., c.l.	lb.	.183	- —
1,000-lb lots	lb.	.193	- —
smaller lots	lb.	.208	- —
Paraldehyde, tech., 98%, 55-gal. dms., c.l., works	lb.	.14	- —
l.c.l., works	lb.	.15	- —
tanks, works	lb.	.11½-	—

Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidin (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).

Parathion, spray powder, 15%, dealers, bgs., dms., frt. alld	lb.	.50	.53
tech., dms., c.l., t.l., works	lb.	1.3395-	—
l.c.l., works	lb.	1.51	—

Paratoluenesulphonamide (see p-Toluenesulfonamide).

Paris green, dealer, dms., c.l., frt. alld	lb.	.44	- .47
l.c.l., same basis	lb.	.45	- .48
Passion flower herb, bls.	lb.	.25	- —
Peanut meal, 45%, old process, bgs., mills	ton.	55.00	Nom.
Pectin, citrus, NF, powd., bbls	lb.	2.05	- 2.06
tech., powd., bbls.	lb.	1.25	- —
imported, Danish, ex whse	lb.	1.28	- —
Penicillin, crystalline, potassium, bulk, 1,000,000 units.		.050	- .057
Procaine, bulk, 1,000,000 units.		.050	- .057
Sodium, bulk, 1,000,000 units.		.0475-	.0695
Pentachlorophenol, dms., c.l., t.l., works, frt. equald	lb.	.22	- —
l.c.l., same basis	lb.	.23½-	.30
Pentaerythritol, tech., bgs., c.l., works	lb.	.32	- —
l.c.l., works	lb.	.33	- —

Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).

Pentane, indust., tanks, Tex. refy.	gal.	.13	- —
Pepper, black, Malabar, spot, bgs.	lb.	.28½-	—
red, Gondar, spot, bgs.	lb.	No prices.	
Japanese, hontaka bgs	lb.	.34	- —
birdseyes, bgs., new crop	lb.	No prices.	
Mombasa, bgs., shipt	lb.	.56	.57
Nigerian, bgs.	lb.	.42	- —
Turkish, bgs.	lb.	.28	- —
white, bgs	lb.	.35	- .36
Peppermint leaves, USP, dom., bls., dms	lb.	.70	- .75
imp., bls	lb.	.85	- —
Perchloroethylene, dms., c.l., or truckloads, dlvd	lb.	.13	- —
l.c.l., dlvd.	lb.	.14½-	—
tanktruck, 1,000 gal., min. dlvd	lb.	.12	- —
tanks dlvd	lb.	.11½-	—
Peru balsam, dms	lb.	1.35	- —
Petrolatum, extra amber, dms., c.l., refy.	lb.	.06½-	—
l.c.l., dlvd	lb.	.08¼-	—
tanks, refy.	lb.	.04¼-	—
cream, dms., c.l., refy	lb.	.07½-	—
l.c.l., dlvd.	lb.	.09¾-	—
tanks, refy.	lb.	.05¼-	—
USP, white, lily, dms., c.l., refy.	lb.	.07⅞-	—
l.c.l., dlvd	lb.	.10⅛-	—
tanks, refy	lb.	.05⅜-	—
snow, dms., c.l., refy	lb.	.08⅜-	—
l.c.l., dlvd	lb.	.10⅝-	—
tanks, refy	lb.	.06⅛-	—
yellow, soft, dms., c.l., refy.	lb.	.06½-	—
l.c.l., dlvd	lb.	.08¼-	—
tanks, refy	lb.	.04¼-	—
Petroleum, lacquer diluent, 150-240°F, b.r., tanks, West Coast, ex tax, Los Angeles.	gal.	.169	.204
East coast, N. J., N. Y.	gal.	.19	- —
Group 3, benzol-type	gal.	.14125-	.14625
toluol-type	gal.	.13125-	.13375

Petroleum, mineral spirits, reg. tanks, Calif., ex tax San Francisco	gal.	.164	—
East coast, N.J., N.Y	gal.	.17	—
Group 3	gal.	.11875	—
tankwagon, Boston	gal.	.19	—
Buffalo	gal.	.195	—
Chicago	gal.	.279	—
Cleveland	gal.	.22	—
Newark	gal.	.18	—
New York	gal.	.18	—
Philadelphia	gal.	.185	—
Pittsburgh	gal.	.18	—
Providence	gal.	.195	—
odorless, tanks, rcfy. Watson, Cal	gal.	.245	—
Borger, Tex	gal.	.24	—
Houston, Tex	gal.	.24	—
Wood River, Ill.	gal.	.2625	—
N. J., dlvd	gal.	.32	—
N. Y., dlvd	gal.	.33½	—
tankwagon, N. J., dlvd	gal.	.36	—
N. Y., dlvd.	gal.	.37	—
Naphtha, cleaners, tanks, East Coast, N. J., and N. Y.	gal.	.17	—
Group 3	gal.	.12875	—
tankwagon, Newark	gal.	.18	—
New York	gal.	.18	—
Philadelphia	gal.	.185	—
High solvency (see Petroleum solvent, partial aromatic)			
VM&P, 225°-300°F., b.r., tanks, West Coast, Los Angeles	gal.	.169	—
Portland, Ore	gal.	.175	—
San Francisco	gal.	.174	—
Seattle, Wash	gal.	.175	—
East Coast, N. J. and N. Y	gal.	.18	—
Group 3	gal.	.12875	—
tankwagon, Boston	gal.	.205	—
Chicago	gal.	.289	—
Cleveland	gal.	.23	—
Newark	gal.	.195	—
New York	gal.	.195	—
Philadelphia	gal.	.20	—
Pittsburgh	gal.	.19	—
Solvent, partial aromatic, tanks, 205°-282°F., b.r., 41°C., m.a.p., N. Y., N. J	gal.	.245	—
212°-278°F b.r. 43°C. m.a.p., N. J	gal.	.26	—
212°-284°F b.r. 19°C. m.a.p., N. J	gal.	.29	—
224°-280°F., b.r., 48°C, m.p.a., Houston	gal.	.215	—
273°-361°F b.r. 29°C m.a.p., N. J	gal.	.29	—
282°-325°F b.r., 41.5°C. m.a.p. Houston	gal.	.25	—
287°386°F., b.r. 31°C. m.a.p., N. J.	gal.	.29	—
310°-314°F., b.r., 13.5°C., m.a.p., Texas City	gal.	.33	—
310°-348° b.r., 17°C., m.a.p., N. Y., N. J	gal.	.35	—
320°-360°F., b.r., 16°C., m.a.p., N. Y., N. J	gal.	.33	—
324°-349°F., 37°C., m.a.p., Houston	gal.	.33	—
341°-390°F., b.r., 35°C., m.a.p., N. J	gal.	.27	—
352°-413°F., b. ., 30°C., m.a.p. Houston	gal.	.33	—
358°-401°F., b.r., 25°C., m.a.p., N. Y., N. J.	gal.	.39	—
364°-404°F b.r., 19°C. m.a.p., N. Y., N. J	gal.	.425	—
367°-418°F b.r. 19.6°C. m.a.p., N. Y., N. J	gal.	.33	—
Rubber, tanks, Cal., ex tax, San Francisco	gal.	.173	—
East Coast, N. J., N. Y.,	gal.	.18	—
Group 3	gal.	.12875	—
Stoddard, tanks, East Coast, N. J., N. Y.	gal.	.17	—
Group 3	gal.	.12375	—
Pennsylvania western	gal.	.15	—
tankwagon, Boston	gal.	.19	—
Chicago	gal.	.289	—
Cleveland	gal.	.22	—
Los Angeles, ex tax	gal.	.194	—
Newark	gal.	.18	—
New York	gal.	.18	—
Philadelphia	gal.	.185	—
Pittsburgh	gal.	.18	—
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works	lb.	.16½	.18¾
l.c.l. works	lb.	.17½	.19
tanks, works	lb.	.14½	.17
50-55% sulfonic content, non-ret. dms., c.l. works	lb.	.16	—
l.c.l. works	lb.	.17	—
tanks, works	lb.	.13	—
o-Phenetidine, dms., t.l., frt. alld. E	lb.	.91	—
l.c.l., same basis	lb.	.93	—
p-Phenetidine, dms., c.l., frt. alld.	lb.	1.00	—
l.c.l., same basis	lb.	1.03	—
Phenobarbitol, USP, dms., 100-lb. lots	lb.	3.25	3.75
Phenobarbital-sodium, USP, dms., 100-lb. lots	lb.	3.25	3.75
Phenol, 90-92% (cresol 8-10%), non-ret. dms. c.l. frt. alld E. of Rockies	lb.	.17¾	.18
l.c.l. same basis	lb.	.18¼	.19
tanks, same basis	lb.	.16	—
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis	lb.	.17½	—
l.c.l., same basis	lb.	.18½	—
tanks, same basis	lb.	.15½	—
39°C or above, tar distilled, non-ret dms. c.l., same basis.	lb.	.19¼	.19¼
l.c.l same basis	lb.	.19¾	.20½
tanks, same basis	lb.	.17½	—
USP, syn., dms. c.l., t.l., frt. alld	lb.	.20	—
l.c.l., same basis	lb.	.22	—
tanks, same basis	lb.	.18	—
Phenolphthalein, USP or yellow, bbls., dms., 2,000-lb. lots.	lb.	1.15	—
smaller lots	lb.	1.17	1.22
Phenothiazine, NF, fib. dms., c.l., frt. adjusted	lb.	.39	—
over 2,100 lbs., same basis	lb.	.41	—
less than 2,100 lbs., same basis.	lb.	.43	—
Phenyl acetate, dms., 100-lb. lots, works	lb.	.50	—
Salicylate (see Salol.)			
Phenylacetaldehyde, soln., 50%, bots	lb.	2.40	2.70
100%, bots	lb.	4.00	4.65
1-Phenyl-3-carnethoxy pyrazolone-5, 250-lb. fib dms., dlvd. E	lb.	3.60	—
smaller dms., dlvd. E	lb.	4.00	—
N-Phenyldiethanolamine, dms., c.l., dlvd. E	lb.	.40¼	—
l.c.l., dlvd. E	lb.	.41½	—
tanks, dlvd. E	lb.	.38½	—
m-Phenylenediamine, dms. frt. alld.	lb.	95	—
o-Phenylenediamine, comi., 100 to 1,000 lbs., fib. dms., works	lb.	1.70	1.80
p-Phenylenediamine, refd., tech., dms., works	lb.	1.42	—
Phenylethanolamine, d m s., c.l., works	lb.	75½	—
l.c.l., same basis	lb.	.76	—
dl-Phenylalanine, dms. works	lb.	27.00	37.50
Phenylethyl acetate, bots	lb.	1.25	1.60
Phenylhydrazine base, CP, bots	lb	3.00	3.07
Hydrochloride coml. kgs., works.	lb	1.75	—
purif., bots., works	lb	5.17	—
1-Phenyl-3-methyl pyrazolone-5 250-lb lots, dlvd E	lb	1.80	—
smaller lots, dllvd. E	lb.	2.10	—
Phenylethylphenyl acetate, bots	lb.	4.15	4.35
o-Phenylphenol, dms. l.c.l. works.	lb.	.42	.44
p-Phenylphenol, bgs., c.l., works	lb.	.37	—
l.c.l., works	lb.	.41½	—
Phloroglucinol coml. fib dms., works	lb	6.40	—
C.P., bots. works	lb.	17.75	—
tech., fib drums. works	lb.	10.45	—
Phosphate defluorinated (see under D) Rock, Curacao Atlantic ports, New Orleans	ton.	48.00	—
Florida land pebble, run-of-mine, washed dried unground, bulk, c.l., mines, 68-66% b.p.l., bulk, c.l., mines	long-ton.	4.94	4.99
70-68%, b.p.l., c.l., same ba.is	long-ton	5.34	5.39
72-70%, b.p.l., c.l., same basi.	long-ton	5.99	—
75-74%, b.p.l., c.l., same basis	long-ton	6.99	—
78-76%, b.p.l., c.l., same basis	long-ton.	7.99	—

The Florida prices (above) are based on fuel oil at $2.47 per bbl. and labor at $1.43. Recent oil advance currently absorbed.

Phosphorus amorph. red dms., t.l. works	lb.	.48	—
smaller lots, works	lb.	.49	.50
Phosphorus, amorph., white (yellow), solid, dms., c.l., works,, frt. equald	lb.	.20	.20½
l.c.l. works frt equald	lb.	.21½	—
tanks works. frt equald.	lb.	.19	—
Oxychloride, dms., c.l., works	lb.	.14	—
l.c.l., works	lb.	.15	—
tanks works	lb.	.12½	—
Pentasulfide, solid, dms., c.l., works	lb.	.11½	—
l.c.l. works	lb.	.12½	—
Pentoxide, dms., c.l., works	lb.	.13½	—
l.c.l. works	lb.	.16½	—
Sesquisulfide, tins, cs., c.l., works.	lb.	.38	—
l.c.l., works	lb.	.39	.40
Trichloride, dms., c.l., works	lb.	.14	—
l.c.l. works	lb.	.15	—
tankcars, works	lb.	.12½	—
Phthalic anhydride, bgs., c.l., works, frt. equald	lb.	.21	—
l.c.l., same basis	lb.	.22	—
tanks, same basis	lb.	.20½	—
Phthalimide, 97%-98%, dms., frt. equald	lb.	.65	—
Phthalylsulfacetamide, 1,000-lb. lots or more	lb	5.00	—
NF	lb.	5.20	—
a-Picoline, ret. dms., c.l., works, frt. equald	lb	.43	.43½
l.c.l., works, frt. equald	lb.	.44	—
tanks, same basis	lb.	.415	.422
b,g-Picoline 5°C. dms. c.l., works.	lb.	.32½	—
l.c.l. works	lb	33	—
g-Picoline 96% dms works	lb	2.00	—
Pilocarpine hydrochloride, USP bots	oz	4.75	5.25
Nitrate USP bots vials	oz	4.63	4.75
Pimento, Jamaican, bgs	lb.	72	—
Mexican, bgs	lb.	.45	—
Pink root, bls	lb	2.50	—
Piperazine, crude, dms., c.l., works.	lb.	3.15	—
l.c.l., works	lb.	3.30	—
Hexahydrate, French Codex, bots.	kilo.	8.00	8.50
Piperidine dist. dms frt equald	lb	2.60	2.70
Piperonyl butoxide dms dlvd E	lb	4.50	5.05
Pitch, coaltar, bulk, aluminum, works	ton.	40.00	42.00
carbon and industrial, works.	ton.	40.00	—
core, works	ton.	36.50	—
fiber, works	ton.	44.00	—
Roofing, 140-155°F., Fed. Spec. RP-381, Type I, tanks, works	ton.	39.00	—
Cottonseed raw dms. works	lb.	.03	.03¼
tanks, same basis	lb.	.02¾	—
Linseed, dms	lb.	.06	.06¾
Marine, dms	lb.	.04¼	.05
Petroleum (see Asphalt, petroleum).			
Soybean, dms., works	lb.	.05	.05½
Tall, dms., c.l., works	ton.	50.00	70.00
tanks, works	ton.	30.00	40.00

need ***FAST*** *delivery?*

specify **PENOLA SOLVENTS**

for all three important advantages:

- **IMMEDIATE AVAILABILITY** – a call is all it takes to meet your processing needs. Penola's multi-location storage facilities assure ready supply.
- **FAST DELIVERY** – your solvent reaches you quickly by truck or tank car.
- **QUALITY** – you can depend on the tested purity of Penola Solvents for high efficiency and economical processing.

And Penola's *balanced solvency, controlled evaporation* and *exact uniformity* are extra reasons for choosing Penola Solvents. For expert technical assistance and any technical data you require regarding your processing operations, be sure to call the Penola Office nearest you.

Penola Oil Company New York • Detroit • Chicago

Penola

Plaster of Paris (see Gypsum).
Platinum metal, works ..... oz. 105.00 -107.00
Pleurisy root bls ..... lb. .45 .50
Podophyllum resin, NF, dms.. lb. 15.60 -16.10
Poke root bls ..... lb. .19 .22
Polymyxin, bulk bots. dms., 50 billion units or more, 1,000,000 units. .52 - —
25-50 billion units 1,000,000 units. .54 - —
1-25 billion units 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate dms. 20,000-lb lots, works lb .41 - —
10,000-20,000 lb lots, works, lb .43 - —
smaller lots, works lb .46 .48
Tristearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000 lb lots, works, lb .43 —
smaller lots, works lb .46 .48
Poppy seed, Argentine, bgs ..... lb. .24 - —
Dutch, bgs ..... lb. .28½- —
Iranian, bgs ..... lb. .14½- .15
Polish, bgs ..... lb. .28 - —
Turkish, bgs. ..... lb No prices.
Potash caustic reg. flake, 88-92% dms. c.l., works 100 lbs 9.15 - —
l.c.l., works 100 lbs 10.20 - —
liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs 5.05 - —
tanks, same basis 100 lbs 3.70 - —

Potash, caustic, solid, 88-92%, dms., c.l., works 100 lbs. 8.70 - —
l.c.l., works 100 lbs. 9.75 - —
Potassium acetate, NF dms lb .31 - .36
Bicarbonate, USP, gran., dms lb .22 - —
powd., dms. lb .24 - —
Bichromate, gran., bgs., c.l., t.l., works lb .18 - —
l.c.l., works ..... lb .18½- .19¾
Potassium bichromate in dms. ¾c. higher.
Bitartrate, NF, dom., gran. or powd., bbls. 5,000 lbs., 1 ship't lb .40½- —
dms., c.l. ..... lb .40 - —
smaller lots ..... lb .41 - .43
imp., kgs ..... lb .32 - .35
Bromate dms. 1,000 lbs or more. lb .50 —
25-200-lb. lots ..... lb .52 .62
Bromide, USP, gran., bbls., kgs. lb .37 - .38
Carbonate, NF gran. bbls. dms. lb .20 - —
powd., bbls. dms lb 21 - .22
tech. calcined bbls. c.l., works. 100 lbs. 9.00 - —
l.c.l., same basis 100 lbs 10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs 8.65 - —
Chlorate cryst. dms. c.l. works. lb .11¼- —
l.c.l., works ..... lb .11½- .12½
powd., dms., c.l., works . lb .11¾- —
l.c.l., works ..... lb .12 - .13
NF, gran., 25-lb. metal dms lb. .36 - —

Potassium chloride, agricultural (see Potassium muriate).
indust. 99.9% KCl, bulk, c.l., works ton 29.00 - —
bgs., c.l., works .... ton 33.50 - —
99.3% KCl, bulk, c.l., works ton 27.00 - —
bgs., c.l., works..... ton 31.50 - —
USP, cryst., dms..... lb. .21 - .23
gran., dms ..... lb. .15 - .17
powd., dms ..... lb. .24 - .26
Chromate, tech., bgs. ..... lb. .50 - .50½
Citrate, USP, gran., dms..... lb. .43 - —
powd., dms ..... lb. 40½- .41½
Cyanide dms., 20,000-lb. lots or more works lb. .45 - —
2,000-19,999-lb lots, works lb. .455 - —
smaller lots, works lb. .465 - —
Dichromate (see Potassium bichromate)
Ferricyanide, dms., ton lots, works. lb. .50 - —
smaller lots, works ..... lb. .65 - —
Ferrocyanide, bgs., ton lots... lb. .23 - —
smaller lots ..... lb. .23½- —
smaller lots ..... lb. .23 - —
Fluoborate fib dms. c.l., works lb .30 - —
l.c.l. works ..... lb. .31 - —
Fluoride, dms., works ..... lb. .37 - .38
Gluconate, dms. ..... lb 1.60 - —
Guaiacolsulfonate, NF, dms lb 2.10 - 2.30
Hydroxide, tecn. (see Potash caustic).
USP, pellets 100-lb. dms. 1 to 100-dm lots lb. .28½ - .33
Hypophosphite, NF, fib dms., ton lots or less lb. 1.00 - 1.03
Iodide, dms ..... lb 1.90 - 1.95
Metabisulfite, gran., dms. .... lb. .20 - .21
powd., dms ..... lb. .25 - —

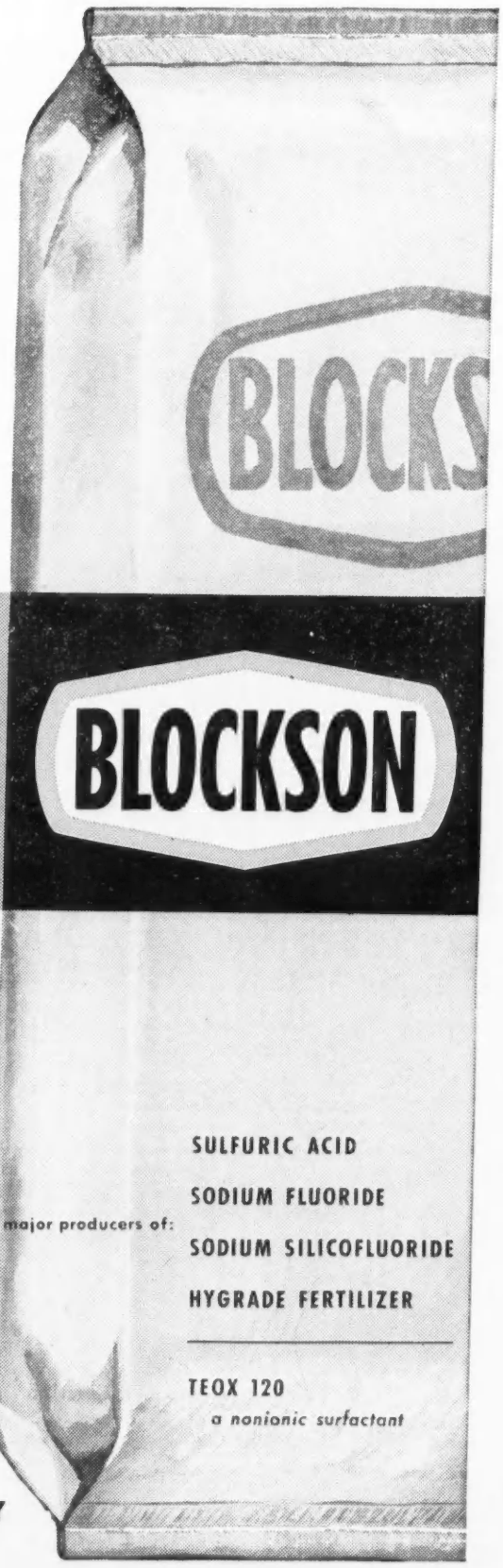
Potassium muriate, standard and granular, 59-63% K_2O, bulk, c.l., works, base price, unit-ton. .36 - —
July forward unit-ton. .38 - —
granular, 60-63% K_2O, bgs., c.l., works, base price ton 26.25 - —
July forward ton 27.45 - —
Nitrate, cryst., bbls., 20-ton lots. 100 lbs. 14.40 - —
smaller lots ..... 100 lbs. 14.65 -14.90
gran., bbls., 20-ton lots. 100 lbs. 9.75 - —
smaller lots ..... 100 lbs. 11.10 -11.50
powd., bbls., 20-ton lots. 100 lbs. 10.75 - —
smaller lots ..... 100 lbs. 12.00 -12.50
USP, gran., dms. ..... lb. .18 - —
Potassium nitrate in bags 50c per 100 lbs. less in kegs $1 more
Oxalate, neutral, tech., fine gran., bbls., dms ..... lb. .30 - .31
Pentaborate gran., bgs., c.l., works. ton 191.50 - —
dms. ton lots, ex whse ton 193.00 - —
smaller lots, ex whse ton 302.50 - —
Powdered potassium pentaborate $10.25 per ton higher
Perchlorate, dms., c.l., works lb. .18½- —
l.c.l., works ..... lb. .19 .20
Permanganate coml., kgs., works. lb. .24½ 27½
USP dms., works lb. .27¼ 29
Persulfate, bbls., c.l. works lb. .16½- —
dms., 5-ton lots, works lb. .18 - —
1-ton lots, works lb. .20 - —
Pyrophosphate, tetrabasic, dms., works lb 15½ 18½
Prussiate red (see Potassium Ferricyanide)
yellow (see Potassium Ferrocyanide)
Silicate, glass, bgs., c.l., works. 100 lbs. 17.00 -17.30
l.c.l. works ..... 100 lbs. 17.60 - —
soln., clarif., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 - —
l.c.l., 5 dms. or more works 100-lbs 6.55 6.95
tanks, works 100-lbs 5.45 - —
electrical grade, 29° Be., 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
l.c.l., 5 dms. or more works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be. 1:2.1, dms., c.l., works 100 lbs. 6.45 - —
l.c.l., 5 dms. or more works 100 lbs. 7.20 7.60
tanks, works 100 lbs. 6.10 - —
Silicofluoride bgs., works lb. .09½ .10
tanks, works ..... 100 lbs. 6.10 - —
Potassium silicofluoride in drums, 0.4c. per lb higher
Stannate, dms., frt. alld. E lb. .752 - .818
Sulfate agricultural, 50% K_2O, bulk, works, base price, unit-ton. .64 - —
July forward unit-ton .67 - —
NF VII, cryst., dms ..... lb. .31 .33
gran., dms ..... lb 18½ —
powder dms. ..... lb 16½ .17
Sulfocyanate, NF, cryst., (see Potassium thiocyanate).
5-ton lots, works lb .14½ —
1-ton lot or less, works lb. .14¾ —
Thiocyanate, NF, cryst., dms lb. .84 .94
tech., works lb. .77 .79
Titanate, clns. c.l., works lb. .14 —
Toluene sulfonate, dms., c.l., or t.l., works lb. .42 - —
l.c.l. works ..... lb. .46 - —
Potassium-magnesium sulfate, bulk, works, basis 40% K_2SO_4, 18% MgO base price ton 13.45 - —
July forward ton 14.90 - —
Potassium-sodium tartrate, NF, gran., powd., dms., c.l lb. .42½- —
5,000-lb. lots ..... lb. .43 - —
smaller lots ..... lb. .43½- .49
Potassium-titanium fluoride, fib. dms. works lb. .39 .40
Potassium-zirconium fluoride, fib. dms, c.l., works lb. .50 —
l.c.l., works ..... lb. .52½ .55
Pregnenolone, bots. ..... gram .45 - —
Acetate, bots ..... gram .40 - —
Procaine hydrochloride, USP, dms. 1,000-lb. lots, frt. alld lb 2.83 - —
100-500-lb. lots ..... lb 2.95 3.15
Progesterone USP bots., 100 gram lots gram .50 - —
Acetate, bots. ..... gram .70 - —
Propane, indust., tanks, group 3 gal. .05 - —
N. Y. Harbor ..... gal. .093 - —
n-Propyl acetate, dms., c.l., dlvd. lb. .13¼- —
l.c.l., dlvd ..... lb. .14¼- —
tanks, dlvd ..... lb. .11¼- —
Gallate, dms., 100 to 2,000-lb. lots, works lb. 3.90 4.40
p-Hydroxybenzoate, USP, dms lb 2.30 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo 55.00 - —
smaller lots kilo 55.10 -55.30
Propy thiouracil prices in West 1c. higher dlvd. on same basis.
Propylene dichloride, dms. c.l., dlvd. E lb. .09½- —
l.c.l., same basis ..... lb. .10½- —
tanks same basis ..... lb .07 —
Glycol, indust., dms., c.l., dlvd. E. lb. .16 - —
l.c.l. same basis ..... lb. .17 - —
tanks same basis ..... lb. .13½ —
USP, dms., c.l., dlvd. E lb. .18 - —
l.c.l., same basis ..... lb. .19 - —
tanks, same basis lb. .15½ —
Methyl ether dms., c.l., dlvd lb. .20 - —
l.c.l. same basis lb .21 —
tanks, same basis lb. .18½- —
Oxide, dms., c.l., dlvd. E lb. .17½- —
l.c.l. dlvd E lb. .18½- —
tanks dlvd E lb. .15½ —
Psyllium seed, black, bgs ..... lb. .28 - .30
blonde bgs ..... lb. .18 —
husks bgs ..... lb. .40 - —
Pumice dom., grd., coarse to fine, 0 ½ 1 1½ 2, 3, bgs., ton lots lb. .03⅝ .04¼
smaller lots ..... lb. .03⅞ .04½
imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs. ton lots ..... lb .04 - —
sun dried, coarse, bgs.... ton 58.00 - —
Pumpkin seed, bgs ..... lb .25 - .26
Pyrethrin, syn (see Allethrin)
Pyrethrum flowers fine grd., 0.9% pyrethrins, bbls. works lb. .45 - —
powd. 1.3% pyrethrins, obls., works lb. .65 - —
liq. 20/1 basis (2 grams pyrethrins per 100cc odorless base), 100/1 basis (10 grams pyrethrine per 100cc odorless base) dms., works gal. 41.75 -42.75
oleoresin dewaxed, 20% dms. works lb. 10.00 —
purif. 20% dms. works lb. 10.00 -10.10
Pyridine, denaturing, dms., c.l., works and frt. equald gal 2.77 - —
l.c.l., same basis gal 2.80 - —
refd., 2° non-ret dms., l.c.l., same basis lb .75 - —
Pyridoxine hydrochloride, bots., 100-gram lots gram .37½- —
Pyrites, Canadian, works long-ton 3.00 5.00
Pyrocatechol (see Catechol).
Pyrogallol, NF, dms. ..... lb. 3.27 3.30

Sodium Tripolyphosphate

Tetrasodium Pyrophosphate
ANHYDROUS

Sodium Polyphos
(SODIUM HEXAMETAPHOSPHATE)
(SODIUM TETRAPHOSPHATE)

Trisodium Phosphate
CRYSTALLINE
MONOHYDRATE



Sodium Phosphates

BLOCKSON

Trisodium Phosphate
Chlorinated

Disodium Phosphate
ANHYDROUS
CRYSTALLINE

Monosodium Phosphate
ANHYDROUS
MONOHYDRATE

Sodium Acid Pyrophosphate

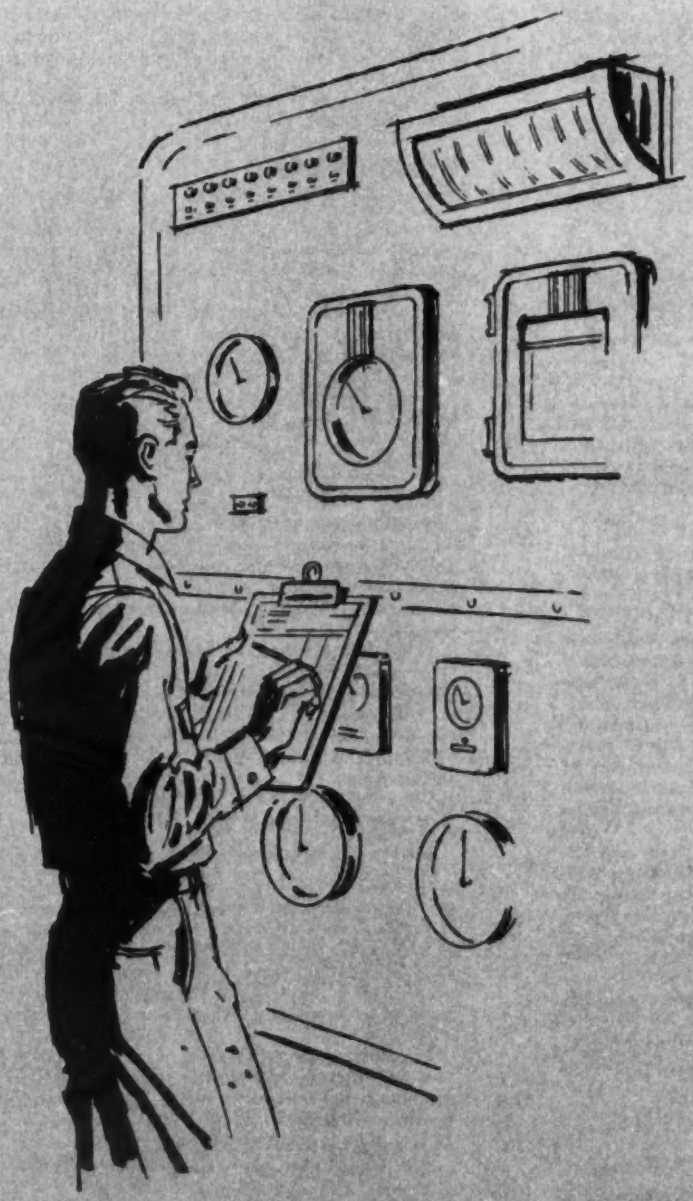
also major producers of:

SULFURIC ACID
SODIUM FLUORIDE
SODIUM SILICOFLUORIDE
HYGRADE FERTILIZER

TEOX 120
a nonionic surfactant

BLOCKSON CHEMICAL COMPANY
Division of Olin Mathieson Chemical Corporation
JOLIET, ILLINOIS

principal chemicals of the Du Pont Polychemicals Dept. 1957 FILE



A dependable source for solvents, organic acids, alcohols and other basic chemicals...

the POLYCHEMICALS DEPARTMENT of DU PONT

You can rely on the quality ami
from the **DU PONT POL**

ADIPIC ACID

$(CH_2)_4(COOH)_2$ — **White crystals**

Adipic acid is an organic dibasic acid with the chemical properties characteristic of this group of compounds. It is soluble in alcohol, slightly soluble in water.

Adipic acid is used in the manufacture of adipic acid esters. These esters are excellent plasticizers, especially for vinyl resins, to which they impart good low-temperature properties. Other uses of adipic acid include the manufacture of modified alkyd resins and polyesters for polyurethane foam and rubber production.

Shipped in 50-lb. multi-ply paper bags from strategically located stock points.

"ARBONEELD"* A

dimethylolurea — **Coarse-ground solid**

"Arboneeld" A is a urea-formaldehyde composition with a urea-formaldehyde mol ratio of 1:2, and a minimum urea-formaldehyde content of 87% by weight. It is water-soluble up to 24.2% by weight at 20°C.

"Arboneeld" A is used in the impregnation of wood to increase hardness, density and dimensional stability; as an insolubilizer for starch in clay-coated papers; and in certain specialty applications common to urea-formaldehyde resins.

Shipped in 100-lb. paper bags.

CRYSTAL and SHOTTED UREA

(carbamide) $(NH_2)_2CO$ — **White crystals or pellets**

Industrial urea is one of the most versatile of all basic chemicals. Because of its reactivity with aldehydes, it finds one of its major uses in urea-formaldehyde thermosetting resins for adhesives, protective finishes, molding powders and for treating paper and textiles.

Because it neutralizes acids, urea is used in ammoniated dentifrices and as a stabilizer. It decomposes at temperatures over 133°C. to release carbon dioxide and ammonia gases, permitting its use in the manufacture of many foamed products.

Urea is used extensively for softening paper and cellulose; its hygroscopic properties are particularly helpful in this application. And because urea has the ability to increase the solubility of certain compounds in water, it is used in paper adhesives and in starch coatings.

Other applications of industrial urea include its use in the synthesis of dyes and pharmaceuticals, in fire-resistant paints, and with starch and other materials for weighing, sizing and finishing textiles.

Both crystal and "shotted" ureas are shipped in 100-lb. multi-ply paper bags from strategically located stock points.

DIGLYCOLIC ACID

$O(CH_2COOH)_2$ — **White crystals**

Diglycolic acid is a dibasic acid, completely soluble in water and the lower alcohols. Its major use is in the manufacture of resins and plasticizers.

Chemically, diglycolic acid reacts with alkalies to form acid and neutral salts and with alcohols to form esters. It reacts with ammonia—under proper dehydrating conditions—to form either the amide or the six-membered cyclic imide.

Shipped in 50-lb. multi-ply paper bags.

DIMETHYL SULFATE

$(CH_3)_2SO_4$ — **Clear, colorless liquid**

Dimethyl sulfate is a highly reactive compound and is an important methylating agent in organic synthesis. It is reactive at low temperatures; its high boiling point (188.8°C.) permits its use at atmospheric pressure; it is economical. Dimethyl sulfate is soluble in alcohol, ether and benzene. It is used in the manufacture of a number of synthetic drugs and in certain dye intermediates.

Shipped in tank cars and special 10-gallon and 55-gallon returnable steel drums.

FORMAMIDE

(technical) $HCONH_2$ — **Clear, colorless liquid**

Formamide is an exceptionally good solvent for inorganic salts, casein, gelatin, animal glue, starch, lignin, glucose, and zein. It is completely miscible with water, methanol, and ethanol.

Applications for formamide, other than as a solvent, include its use as a softener (e.g., in paper, glues); as an intermediate in the manufacture of pharmaceuticals; and in the manufacture of formic acid.

Shipped in tank cars and 55-gallon non-returnable steel drums.

"HEXALIN"*

cyclohexanol $C_6H_{11}OH$ — **Clear, colorless liquid**

"Hexalin" cyclohexanol is a particularly good solvent for gums, resins and waxes. It is miscible with alcohol, aromatic hydrocarbons and most other common organic solvents. It is soluble in water up to 3.6% by weight (at 20°C.) and dissolves in water up to 11% by weight.

"Hexalin" is especially useful in the manufacture of ester plasticizers. It is also used as a solvent in lacquers, shellacs and varnishes; as a non-corrosive degreasing agent for metals; as a diluent thinner of fuel-oil additives; and as a stabilizer in textile soaps.

Shipped in tank cars and 55-gallon non-returnable steel drums.

HYDROXYACETIC ACID

(glycolic acid, tech. grade, 70%) $HOCH_2COOH$ — **Straw-colored liquid**

Hydroxyacetic acid is a relatively strong organic acid, having properties common to this class of compounds. It is miscible in all proportions with water and water-soluble organic solvents such as methanol, ethanol, acetic acid and acetone. It is easier to handle than the mineral acids and more economical than other organic acids.

Hydroxyacetic acid is used in acid detergents for the cleaning of dairy and similar equipment. Other applications include its use in electropolishing and electroplating solutions, in the acid dyeing of wool as well as in the dyeing and tanning of leather.

Shipped in tank cars and 50-gallon wooden barrels.

"HYTROL"* O

cyclohexanone $C_6H_{10}O$ — **Clear, colorless liquid**

"Hytrol" O cyclohexanone is an especially outstanding solvent for nitrocellulose and for polyvinyl chloride and its copolymers. It dissolves a number of plastics and resins and is miscible with ether, alcohol and most other organic solvents. Nine grams of "Hytrol" O will dissolve in 100 cc. of water at 30°C.

"Hytrol" O is used in many types of finishes, especially those based on vinyl resins. It is also used as the active ingredient in vinyl dispersions, as a solvent for DDT in insecticides.

Shipped in tank cars and 55-gallon steel drums.

niformity of each of these chemicals

HEMICALS DEPARTMENT

"LOROL"*

fatty alcohols $CH_3(CH_2)_nCH_2OH$

"Lorol" fatty alcohols are a group of straight-chain (normal) even-numbered carbon alcohols ranging from C-8 (n-octyl) to C-18 (stearyl).

"Lorol" fatty alcohols can be esterified with acids to form the corresponding esters. They can be oxidized to the corresponding aldehyde, which can be oxidized further to the corresponding acid.

"Lorol" fatty alcohols are readily sulfated to form excellent detergents. They are also used as emulsifying and softening agents in cosmetics, salves and ointments; in the manufacture of plasticizers; in the manufacture of lubricating-oil additives; and as anti-foam agents in the paper and textile industries. "Lorol" fatty alcohols are available in the compositions shown below:

"Lorol" 5, "Lorol" 7 and "Lorol" 9

Viscous colorless liquids

. . . technical lauryl alcohols . . . are available in mixtures made up principally of lauryl and myristyl alcohols in varying proportions. "Lorol" 5, "Lorol" 7 and "Lorol" 9 are insoluble in water, and are completely miscible above 30°C. with methanol, 95% ethanol, ethyl ether and benzene.

Shipped in tank cars and 55-gallon drums.

"Lorol" 20

Viscous colorless liquid

. . . essentially n-octyl alcohol, $CH_3(CH_2)_6CH_2OH$. "Lorol" 20 is only very slightly soluble in water (0.059g. octanol per 100 g. water at 25°C.); completely miscible at room temperature with methanol, ethanol and ethyl ether.

Shipped in tank cars and 55-gallon drums.

"Lorol" 22

Viscous colorless liquid

. . . essentially n-decyl alcohol, $CH_3(CH_2)_8CH_2OH$ . . . is insoluble in water; completely miscible at room temperature with methanol, 95% ethanol, ethyl ether, benzene, cyclohexane, carbon tetrachloride, ethyl acetate, and acetone.

Shipped in tank cars and 55-gallon drums.

"Lorol" 24

$CH_3(CH_2)_{14}CH_2OH$ — **White, waxy flakes**

"Lorol" 24 . . . a cetyl alcohol . . . is available in a National Formulary grade. "Lorol" 24 is insoluble in water; soluble in methanol, 95% ethanol, ethyl ether, and benzene.

Shipped in 125-lb. fiber drums.

"Lorol" 28

$CH_3(CH_2)_{16}CH_2OH$ — **White, waxy flakes**

"Lorol" 28 . . . a stearyl alcohol . . . is available in two grades—a technical grade for industrial purposes, and a U.S.P. grade. "Lorol" 28 is insoluble in water; slightly soluble in methanol, 95% ethanol, ethyl ether, and benzene.

Shipped in 50-lb. paper bags (industrial grade) and 50-lb. fiber drums (U.S.P. grade).

METHANOL

CH_3OH — **Clear, colorless liquid**

Methanol is one of the most versatile and reactive of all alcohols. Among its many important chemical reactions are its oxidation to formaldehyde and its reactions with organic and inorganic acids to form their methyl esters. It can be decomposed to provide a source of hydrogen and carbon monoxide. It is a solvent for many common resins.

Methanol is completely miscible with water, alcohols, organic esters, ketones, chlorinated hydrocarbons and petroleum ether.

Major uses of methanol include the manufacture of formaldehyde and many methyl esters; constituent of mixed solvents for many purposes, including finishes; solvent for the extraction of mercaptans from gasoline; solvent for the extraction of animal and vegetable oils; solvent in the manufacture of pharmaceuticals; ingredient of automotive and other anti-freezes.

Shipped from strategically located stock points in tank cars, tank transports, tank wagons and 55-gallon drums.

METHYL FORMATE

$HCOOCH_3$ — **Clear, colorless liquid**

Methyl formate is a low-boiling solvent with a pleasant odor, containing 97% of the ester by weight. It is soluble in water up to 30% by weight (at 20°C.), and is miscible with practically all organic solvents. It is a good solvent for cellulose ethers and esters, acrylic resins, and polyvinyl acetate. It is readily hydrolyzed to methanol and formic acid.

Other than its use as a solvent, methyl formate finds application in the manufacture of formates and other organic chemicals, including sulfa drugs. As an ingredient in fumigants, it is harmless and leaves no residual odor or taste.

Shipped in tank cars and 10- and 55-gallon drums.

PROPIONIC ACID

CH_3CH_2COOH — **Clear, colorless liquid**

Propionic acid is an organic acid, soluble in water, alcohol, and most organic solvents. It is used in the manufacture of cellulose propionate and mixed esters, in the manufacture of plasticizers for cellulosic esters, in the manufacture of ester solvents, and in fruit flavors and perfume bases.

Shipped in tank cars and 55-gallon drums.

OTHER PRODUCTS of the Polychemicals Department include:

Chemicals—Hytrol* 10 wood dye stain solvent, Mycoban* sodium and calcium propionates, Lucite* acrylic resin (methacrylate polymers), NuGreen* fertilizer compound, Uramon* ammonia liquors, Zerone* and Zerex* anti-freezes, Two-Sixty-Two* feed compound, Zytel* 61 nylon resin, Uramite* fertilizer compound.

Plastics—Zytel* nylon resin, Teflon* tetrafluoroethylene resin, Alathon* polyethylene resin, Lucite* acrylic resin, Tynex* nylon filament, Pyralin* cellulose nitrate sheeting, Plastacele* cellulose acetate sheeting, Butacite* polyvinyl butyral resin, Rulan* flame-retardant plastic.

*REG. U. S PAT. OFF.

Unmatched Experience

The manufacturing experience behind many of the chemicals made by the Du Pont Polychemicals Department is unmatched among chemical producers. Through the years, improvements in chemical processing technology have been applied so as to guarantee you the ultimate in product quality, purity, and uniformity.

Prompt Delivery and Service

It is our constant aim to make certain that your order is processed without delay and that delivery of product is made as promised. To provide the fastest service possible on such widely used products as methanol, industrial urea, "Hexalin" cyclohexanol, and "Hytrol" O cyclohexanone, a nationwide distributor organization has been set up with location in most principal cities. Complete information on distribution and products is available from the district offices listed below.

District Offices

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7250 N. Cicero Avenue, Lincolnwood
Telephone: INdependence 3-7250

Detroit 35, Michigan
13000 West Seven Mile Road
Telephone: UNiversity 4-1963

Los Angeles 58, California
2930 East 44th Street
Telephone: LUdlow 2-6464

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WILMINGTON 98, DELAWARE

POLYCHEMICALS DEPARTMENT

DU PONT
REG. U.S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

Pyroxylin scrap, ungrd., amber, dms., works lb. .20 - —
black, dms., works lb. .12 - —
mixed mottled c'ms. works lb. .13 - —
shavings, amber, cs., works lb. No stocks.
mixed colors, dms., works lb. .11 —
white, china, ivory, dms., works lb. .16 - —
dense, opaque, dms. works, lb. .12 - .15
translucent pastels, cs., works, lb. .14 - —
colors, dms., works lb. .16 - —
USP bots lb 9.50 - —

Q

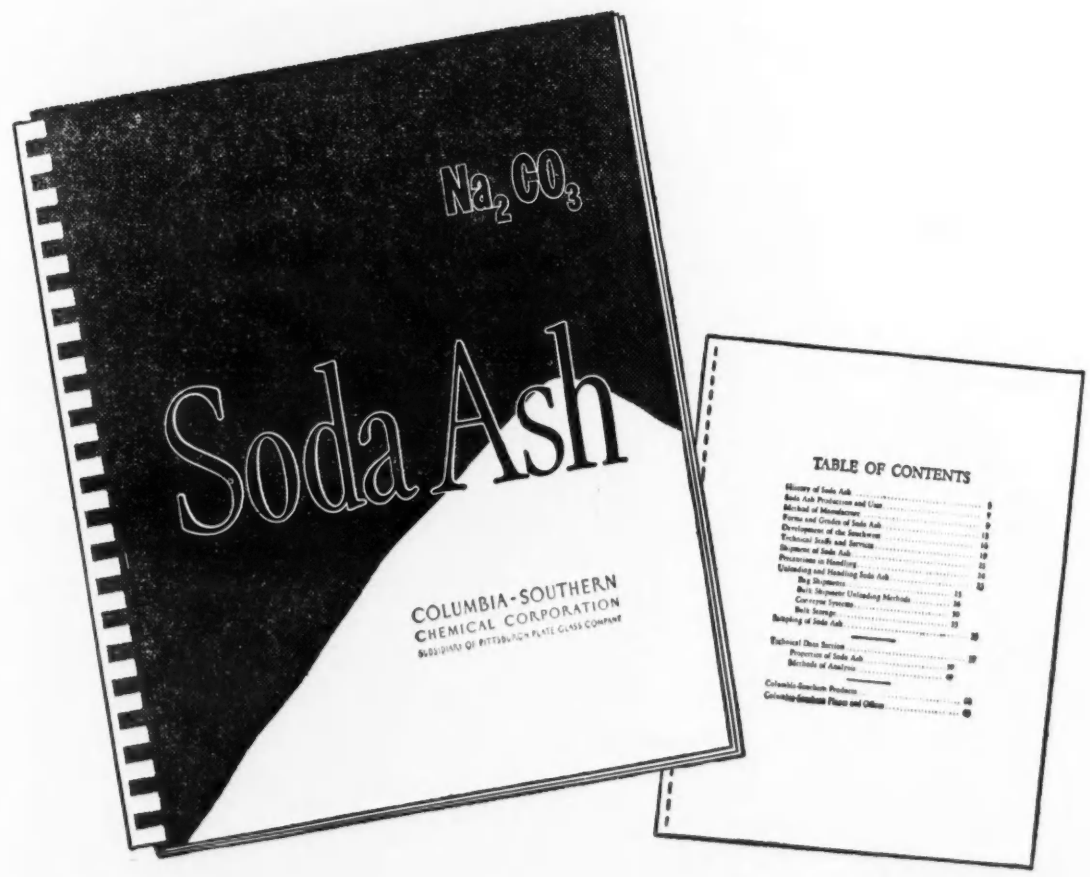
Quassia chips lb. .17 - —
Quebracho extract, clarif., grd., 70% tannin bgs. c.l., lb. .16½- .16¾
liq. 35% tannin bbls. works, lb. .08¼- 08½
solid, clarif., 64% tannin, bgs., c.l., ex-dock, duty extra lb. .12 23/64
ord 65% tannin pgs c.l. same basis lb 11 21/32 —
Quercitron extract cryst., No. 1, bbls., l.c.l. lb. .40 - —
liq. No 1 bbls l.c.l lb .19 - —
Quicksilver (see Mercury metal)
Quince seed, bgs lb 2.00 Nom
Quinidine sulfate USP cns., 100-oz. lots oz. .73 .75
Quinine, NF, cns., 100-oz. lots oz. .54 - —
Bisulfate USP cns., 100-oz lots, oz. .37½ —
Hydrochloride, cns., 100-oz. lots oz. .35 - .47½
Sulfate, USP, cns., 100-oz. lots oz. .29 - .35
Quinoline dms. c.l. frt equald lb .50¾ —
l.c.l., same basis lb. .51¼ —
tanks, same basis lb. .50 - —

R

R salt, paste, dms., frt. alld. 100% basis lb .88 - —
powd. frt alld. 100% basis lb .98 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.75 - —
Red, BON acid maroons, pure, bbls., lb 1.75 - —
resinated bbls lb 1.50 - —
arylid, deep shades, bbls lb 3.60 - —
light shades bbls lb 2.75 - —
maroon bbls lb 3.60 5.90
Cadmium, CP, dark shade, bbls., frt. alld, E. of Rockies lb. 4.30 - —
light shade bbls same basis, lb. 4.00 - —
medium shade bbls., same basis lb 4.25 - —
medium light shade, bbls., same basis lb 4.05 - —
orange shade, bbls., same basis lb. 3.95 - —
orange red bbls. same basis lb 1.81 - —
Selenide, lithopone, maroon shade, bbls., same basis lb. 3.77 - —
dark bbls. same basis, lb. 3.90 - —
red shade, dark, bbls., same basis lb. 3.44 - —
light, bbls., same basis, lb 2.24 2.32
medium, bbls., same basis lb. 2.99 - —
medium light, bbls., same basis lb 2.49 - —
Mercury lithopone, dark shade, bbls., same basis lb. 2.40 - —
light shade, bbls., same basis, lb 1.95 - —
medium shade, bbls., same basis lb 2.25 - —
medium light shade, bbls., same basis lb 2.10 - —
Carmine No. 40 (see Carmine).
Dyes (see Dyes coaltar)
Eosin toner, bbls., works lb. 1.65 - —
Indian, dom., pure, bgs., Bethlehem Easton E St Louis, N Y lb. .12¾- —
Iron oxide, nat., 75-85% ferric oxide bgs l.c.l. Bethlehem Pa., Copley, O., Easton, Pa., bgs. c.l. works lb. .0675- —
Lake C toner, alizarine, bbls., works lb. 1.13 - —
rubine toner pure bbls works, lb. 1.50 - —
resinated, bbls., works lb 1.40 - —
Virginia type bbls., works lb. 1.40 - —
Maroon toner, MNPT, kgs., c.l., works lb 3.60 - —
10,000-lb lots, works lb 4.22 - —
smaller lots works lb 4.24 - —
Mercury oxide, tech. c.l., works, lb. 5.77 - —
Metallic, bbls., c.l., works lb. 02½- —
l.c.l., works lb 02¾ —
Naphthol ITR, bbls., works lb. 5.25 - —
Oxide (see Red iron oxide).
Persian Gulf bgs., c.l., works, lb. 07¾- —
l.c.l. works lb 08 - —
Para toner, bbls lb. 1.10 - —
chlorinated, kgs lb 1.10 1.15
Phloxin toner (see Red eosin toner)
Rhodamine, molybdated, PMA, kegs lb. 5.35 5.60
tungstated, PTMA works kegs, lb 6.40 - —
Spanish oxide, bbls. c.l., ex-dock, lb. .05¾- —
l.c.l., ex dock lb. .06 - —
ex whse. New York lb .06½- —
Toluidine toner, deep shades, kgs., works lb. 1.62 - 1.65
light shades, kgs. works lb 1.62 1.65
Turkey, bbls., works lb. .62 - —
Tuscan, bbls., frt. equald lb .26 .32
Venetian, jobbing, bgs., works lb, .0475- —
lb .0475- —
20%, bgs., works lb. .0525- —
25%, bgs., works lb .0575- —
30% bgs., works lb .06 - —
35%, bgs., works lb .0625- —
40%, bgs., works lb .0675- —
Watchung-type bbls m 1.95 —
Red KB base (see 4-Chloro-2-aminotoluene).
Red precipitate (see Mercuric oxide, red)
Red saunders NF powd. bbls lb. .35 - .40
Reserpine, cryst., bots gram. 3.75 - —
Resorcinol, tech. grade, dms., c.l., works, frt equald lb. 77½- —
l.c.l. same basis lb 78½- —
USP, dms., works lb 2.75 - —
powd., dms., works lb 2.95 - —
Monoacetate NF dms lb 3.00 3.25
Rhatany root bgs lb .15 .16
Rhodinol, 5-lb. cans lb.32.00 -36.00
Rhubarb root, India, whole, bgs. lb. .30 - —
powd., bbls lb. .38 - —
Riboflavin USP, bots., dlvd kilo.65.00 - —
readily soluble, bots., dlvd kilo.130.00 - —
5'-phosphate-sodium, bots., 100-kilo lots or more kilo.125.00 - —
Rochelle salt (see Potassium sodium tartrate).
Roofing pitch (see Pitch, coaltar, roofing)
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works, unit-lb. .12 - —
resin, 25-45% fib. dms., works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, exwhse. lb. .03¾- —
ton lots, same basis lb. .04¼- —
Rutin, NF, fib. dms., 25-kilo lots, kilo.17.50 -18.50
10 to 25-kilo lots kilo.17.50 -20.00
1 to 10-kilo lots kilo.18.90 -20.00
Ryania, 100% powd. bgs., c.l., works lb. .22 - —
l.c.l. same basis lb .24 - —

S

Sabadilla seed, powd., bbls lb. .49 - .49½
activated, ground with lime, bbls. lb. .30 - .32
Saccharin USP cryst., soluble, dms., 1000-lb. lots lb. 1.60 - —
smaller lots lb. 1.70 1.80
powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.65 - —
smaller lots lb 1.75 1.95
Calcium fib dms 1,000-lb. lots, works lb 2.50 - —
Saffron Spanish USP tins lb 45.00 - —
Safrol, dms lb. .90 1.05
Sage, Cretan bgs lb 11 - —
Dalmatian bgs lb 44 —
Italian lb 26 Nom
Sage flour raw, bgs lb 07 07¼
refd. bgs lb 08½- .09
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms lb. 1.25 - —
Salol, NF grnn., bbls., kgs lb 1.15 - —
Powdered salol 25c higher
Salt, rock, paper bgs., c.l 100 lbs. 1.03½- —
table, vacuum common fine, paper bgs., c.l 100 lbs. 1.27½- —
Saltcake, dom. bulk works, 100% Na_2SO_4 basis ton 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood East Indies chips bgs. .65 - .66
powd., fib dms lb .75 - .76
Schaeffer's salt, paste, dms, frt. alld. 100% basis lb. .95 - —
powd bgs. frt alld. 100% basis, lb. .95 - —
Scopolamine hydrobromide, USP bots oz.13.50 -16.50
Seidlitz mixture, bbls. 5,000-lb. lots lb. .30½- —
smaller lots lb. .31 - .32
Selenium, powd., 99½%, dms., dlvd, lb.13.50 -15.50
Senega root, bls lb. 2.75 - —
Senna leaves, Alex, whole and half, bls lb. .19 - —
siftings lb. .17 - —
Tinnevelly, No. 1, bls lb. .16 - .18
No 2 bls. lb. .13 - .15
No. 3, bls. lb. .11 - .13
powdered, bbls., bxs lb. .15 - —
pods bls. lb. .14 - —
Serpentaria root, bls lb. 5.50 - —
Sesame seed, Egyptian, hulled, bgs. lb. .21½- —
nat., bgs. lb. .17 - —
Nicaragua, hulled, shipt., bgs. lb. .25 - —
nat., bgs lb. .16½- —
Salvadorian, natural, bgs lb. .18½- —
Indian, natural, bgs. lb. N.P.
Shellac, bleached, bonedry, bgs., 2,500-lb lots lb. .56 - —
bbls., 1,500-lb lots lb. 57 - —
kgs., 1,500-lb lots lb. .58 - —
refd., bgs., 1,500-lb lots lb. .66 - —
bbls., 1,500-lb lots lb. .67 - —
kgs., 1,500-lb lots lb. .68 —
Bonedry shellac prices for less than 1,500 lb lots 1c per lb higher for all packages.
Lemon, No. 1, bgs., 10-bg. lots lb. .48 - —
No. 2, bgs., 10-bg. lots lb. .45 - —
Superfine, bgs., 10-bg. lots lb. .43 - —
Shellac in 1 to 10-ng lots 1c per lb more.
Shingle stain oil (see Oil shingle stain)
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton 25.00 —
l.c.l. works exwnse ton 45.00 55.00
hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton 20.00 —
l.c.l., works ton 25.00 30.00
140 mesh bgs. c.l., works ton 15.00 —
l.c.l., works ton 20.00 —
Silicon tetrachloride tech. dms., c.l., works lb 18 - —
l.c.l. works lb 22 - .30½
tanks, works lb 17 —
Silver bullion, ingots, cs Troy oz. .91⅜- —
Cyanide fib dms., 2,500-oz. lots oz. .87 - —
1,000-oz. lots oz. .87⅜- —
500-oz. lots oz. .87½- —
100-oz. lots oz. .87¾- —



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Silver nitrate, CP, cryst., bots., 2,500-oz. lots	oz.	.62¼	—
1,000-oz. lots	oz.	.63¾	—
500-oz. lots	oz.	.64	—
250-oz. lots	oz.	.64½	—
USP granular silver nitrate 4c per oz higher			
Proteinate mild USP, bots., dms., 1,000 oz lots	oz.	1.05	—
strong NF bots. dms 1,000 oz lots	oz.	1.00	—
Soapbark, whole, bls	lb.	.38	.40
crushed bls. bbls	lb.	45	—
powd., bbls	lb.	45	—
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs		1.90	—
l.c.l., stock points 100 lbs		3.00	4.77
bulk, c.l., works 100 lbs		1.60	—
light, 58%, paper bgs., c.l., works 100 lbs.		1.85	—
l.c.l., stock points 100 lbs.		3.95	4.72
bulk, c.l., works 100 lbs.		1.55	—
Soda, caustic, flake, 76% dms., c.l., works, frt. equald 100 lbs.		4.70	—
l.c.l., stock points 100 lbs.		5.80	—
liq., 50%, sellers tanks, works, dry basis 100 lbs.		2.90	—
rayon type, sellers, tanks, works, dry basis 100 lbs.		2.90	3.00
73%, sellers' tanks, works, dry basis 100 lbs.		3.00	—
rayon-type, sellers' tanks, works, dry basis 100 lbs.		3.00	3.10
Soda, caustic, solid, 76%, dms., c.l., works 100 lbs.		4.30	—
l.c.l., stock points 100 lbs.		5.50	—
Sal. conc., bgs., c.l., works 100 lbs.		2.50	—
smaller lots, works 100 lbs.		2.80	—
Sodium acetate anhyd. bgs. c.l., works	lb.	13	—
dms., c.l., works	lb.	13¾	—
NF, 60% gran dms. c.l., works	lb.	14	—
l.c.l. works	lb.	15½	—
Alginate NF white powd., dms., ton lots, works	lb	87	1.30
p-Aminobenzoate, dms. 1,000-lb. lots or more	lb.	2.35	—
smaller lots	lb.	2.45	2.55
p-Aminosalicylate, dms., 100 lbs. or more, frt. adjusted	lb	2.70	—
Antimoniate, bbls. c.l., dlvd E	lb.	.28	—
l.c.l., dlvd E	lb.	.29½	—
Arsenate, 45% arsenic pentoxide, dms., c.l., works	lb.	12½	—
l.c.l., works	lb.	13¾	14½
Arsenite 90% pink powder, 75% arsenious oxide, dms., works	lb	12¼	—
l.c.l., works	lb	.13	14½
soln. dms. works	gal	59	67
Ascorbate, dms., 25-50 kilo lots,	kilo.	12.00	—
10-kilo lots	kilo	12.35	—
5-kilo lots	kilo	12.75	—
1-kilo lots	kilo	13.00	—
bots., 500-gram lots	kilo.	13.50	—
Sodium benzoate, tech., bbls., dms., lots or more	lb.	.39	—
USP bbls., dms. 100-lb lots, or more	lb	46	—
Bicarbonate, USP, gran., bgs., c.l., works 100 lbs.		2.95	—
l.c.l., works 100 lbs.		3.85	—
powd., bgs., c.l., works, 100 lbs.		2.55	—
l.c.l., works 100 lbs.		3.45	—
Bichromide, gran., bgs., c.l., t.l., works	lb.	.13	—
l.c.l., works	lb.	.13½	.14¾
Bifluoride bbls., c.l. works, frt. equald	lb.	.19½	—
l.c.l., same basis	lb.	.1950	—
Bisulfate, bulk., c.l., works 100 lbs		2.00	—
dms. c.l. frt equald 100 lbs		3.00	3.60
l.c.l. frt. equald 100 lbs		3.50	4.10
Bisulfite, anhyd., bgs., c.l., works, 100 lbs.		5.00	—
l.c.l., works 100 lbs.		5.40	—
soln. 35° bbls. c.l. works, 100 lbs		1.55	—
l.c.l. works 100 lbs		2.05	—
Borate (see Borax)			
Bromide, USP bbls., works	lb.	.38	—
Carboxymethyl cellulose (see CMC).			
Carbonate, cryst., monohydrated (see Soda, sal).			
monohydrated, bgs., c.l., works, 100 lbs.		3.10	—
l.c.l., works 100 lbs.		3.50	—
Chlorate cryst. dms. c.l. works,	lb	.09	—
l.c.l., works	lb.	.09½	.10½
Chloride, tech (see Salt).			
USP bgs	lb.	.65	.12
Chlorite tech. dms. c.l., works,	lb.	.58	—
20-ton lots or more works	lb	.66	—
smaller lots, works	lb.	70	73
Sodium chloroacetate, tech., dms., c.l., works	lb.	.27	—
t.c.l. works	lb	.28	—
Chromate, anhyd., fiber dms., c.l., t.l., works	lb.	.14¾	—
l.c.l., same basis	lb.	.15¼	.16½
tetrahydrate, bgs., c.l., t.l., works	lb.	.1015	—
t.c.l.	lb.	.1065	.1190
Citrate, anhyd., dms	lb.	.62	—
NF VIII, gran. dms	lb.	.26½	.27½
USP XIV gran., dms	lb.	.29½	.30½
Sodium citrate USP powd. prices higher			½c.
Cyanate, dms., 1,000-lb. lots, works	lb.	.85	1.10
smaller lots works	lb	1.00	1.25
Cyanide flake, 96-98%, dms., c.l., or 20,000-lb. lots	lb.	.178	—
over 1,000-lb lots	lb.	.188	—
100-lb to 1,000-lb lots	lb.	.198	—
Granular sodium cyanide 1c. higher			
Diacetate, 33-35% acidity, 250-lb. dms., works	lb.	.15	—
t.c.l. works	lb.	.15¾	—
anhyd., dms., c.l. works	lb.	.18	—
t.c.l. works	lb.	.18¾	—
Ferrocyanide, bgs., 10-ton lots	lb.	.13½	—
smaller lots	lb.	.14	—
Fluoride, white, 97% fib dms., c.l. works, frt equald	lb.	.1390	—
t.c.l. works	lb	.1430	—
Formate bgs., c.l. works 100 lbs.		7.60	—
l.c.l. works 100 lbs		8.65	—
Gentisate, 100-lb. fib dms	lb.	5.50	—
Gluconate, refd. dms	lb.	.80	.83
tech, dms	lb.	.35	—
Glutamate mono., dms., c.l.	lb.	1.20	—
Hydride, dms., works	lb.	1.80	3.00
Hydrosulfide (see Sodium sulfhydrate)			
Hydrosulfite dmc. c.l. frt. alld.	lb.	.24	—
t.c.l. frt alld	lb.	.24½	—
Hydroxide, NF, pellets, 100-lb. dms. 1 to 100-dm. lots	lb.	.18½	.23
technical (see Soda Caustic)			
Hydrophosphite, NF, dms., ton-lots or less	lb.	.95	.98
Hyposulfite, anhyd., tech., bgs., c.l., works 100 lbs.		7.25	—
l.c.l., works 100 lbs.		7.65	—
photo grade, bgs., c.l., works, 100 lbs.		8.05	—
l.c.l., works 100 lbs.		8.45	—
Hexahydrate, pea cryst., bgs., c.l., works 100 lbs.		5.15	—
l.c.l., works 100 lbs.		5.55	—
photo grade, bgs., c.l., works, 100 lbs.		7.75	—
l.c.l., works 100 lbs.		8.05	—
Pentahydrate, tech., bgs., c.l., works 100 lbs.		5.15	—
l.c.l., works 100 lbs.		5.55	—
Iodide, USP., bots., dms	lb.	2.55	2.62
Lactate, edible, 50%, cbys., dms., works	lb.	.21½	—
60% cbys. dms works	lb.	.26½	—
tech, 50% cbys. dms. works	lb.	.16½	—
Lauryl sulfate, dms., c.l., dlvd	lb.	.19	—
l.c.l., dlvd	lb.	.19½	.20¾
tanks, dlvd	lb.	.18	—
Metabisulfite (see Sodium bisulfite).			
Metaborate octahydrate, gran., bgs., c.l. works ton		85.00	—
ton lots, ex whse ton		137.50	—
smaller lots, ex whse. ton		142.50	—
Tetrahydrate, dms., c.l., works, ton		204.00	—
ton lots, ex whse ton		242.50	—
smaller lots, ex whse. ton		247.50	—
Metallic bricks, 14,000-lb. lots or more, works	lb.	.19½	—
fused, 14,000-lb. lots, works,	lb.	.19	—
tanks works	lb	.16	—
Metanilate, bbls., frt. alld	lb.	.62	—
Metasilicate, anhyd., bgs., c.l., works 100 lbs.		5.70	—
l.c.l., works 100 lbs.		6.15	8.10
dms., c.l. 100 lbs.		6.20	—
l.c.l. 100 lbs		6.65	8.55
Pentahydrate, bgs., c.l., works, 100 lbs.		4.45	—
l.c.l., works 100 lbs.		4.85	6.75
dms., c.l. works 100 lbs.		4.95	—
l.c.l., works 100 lbs.		5.35	7.25
Molybdate, anhyd., dms., works, frt. equald	lb.	.92	.96
cryst., dms., works, frt. alld	lb.	.73	.74
Monohydrate (see Sodium carbonate monohydrated).			
Naphthionate, bbls	lb.	70	—
Nitrate, crude, dom., bgs., c.l., works	ton	47.00	—
bulk c.l. works	ton	43.50	—
imp. 100-lb. bgs., c.l., Atl. Gulf, Pac., whse	ton	49.50	—
bulk, c.l. same basis	ton	46.00	—
Nitrite, USP, bbls., c.l., works, frt. equald 100 lbs.		8.50	—
l.c.l., same basis 100 lbs.		10.50	—
Orthosilicate, conc., dms., c.l., works 100 lbs.		6.70	—
l.c.l., works 100 lbs.		7.05	7.65
hydrated, flake, bbls., c.l., works, 100 lbs.		5.65	—
l.c.l., works 100 lbs.		7.60	7.90
Oxalate, 88%, bgs., works 100 lbs.		10.85	—
Para-aminobenzoate (see Sodium p-Aminobenzoate).			
Para-aminosalicylate (see Sodium p-Aminosalicylate)			
Pentachlorophenate, briquets, bgs., c.l., works, frt. equald	lb.	.26	—
l.c.l. same basis	lb.	.27½	.34
pellets, bgs., c.l., same basis	lb.	.26	—
l.c.l., same basis	lb.	.27½	.34
Pentachlorophenate, powd., bgs., dms., c.l., same basis	lb.	.25	—
l.c.l. same basis	lb.	.26½	.33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c. per lb. over carlot prices.			
Perborate, NF, tech., bgs., c.l., works	lb.	.19	—
l.c.l., works	lb.	.21	—
Peroxide, dms., c.l., dlvd. E. of Miss.	lb.	.20	—
l.c.l. same basis	lb.	.20½	.21
Phenolsulfonate, USP IX, gran., dms	lb.	.44	.45
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs.		7.65	—
l.c.l., works 100 lbs.		8.05	—
USP dried powd. bgs., dms., works	lb.	.19	.20¼
monobasic anhyd., bgs., c.l., frt. equald 100 lbs.		8.70	—
l.c.l., frt. equald 100 lbs.		9.10	9.70
duohydrate, bgs., c.l., frt. equald 100 lbs.		7.20	—
l.c.l., frt. equald 100 lbs.		7.60	8.20
Phosphate, tribasic, anhyd., bgs., c.l., frt. equald 100 lbs.		8.00	—
l.c.l., frt. equald 100 lbs.		9.05	9.65
cryst., bgs., c.l., t.l., frt. equald 100 lbs.		4.40	—
l.c.l., frt. equald 100 lbs.		4.80	5.40
Sodium phosphates in dms., 60c. higher than bgs.			
Prussiate, yellow (see sodium ferrocyanide).			
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lb.		10.85	—
l.c.l., works 100 lbs.		11.60	11.85

Your Cleaners "TIRE OUT" too Fast?

What's buffer capacity? It's the "staying power" of a cleaner or detergent—the ability to maintain a reasonably constant pH in spite of dilution and contamination.

Cowles DRYMET has excellent buffer capacity. Its pH varies only a little with changes in concentration. You can use this buffer capacity of DRYMET to give your formulations more cleaning power—more "staying power".

COWLES CHEMICAL COMPANY
7018 EUCLID AVENUE
CLEVELAND 3, OHIO

Send DRYMET File Folder

Name_____

Company_____

Address_____

City_____ State_____

Cowles CHEMICAL COMPANY

SEND THIS COUPON GET THIS

DRYMET File Folder
for Technical Data

Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .26 - —
l.c.l., works lb. .37 - .39
tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.52½- —
l.c.l., frt. equald 100 lbs. 7.92½- 8.52½
Salicylate, USP, dms lb. .74 - .76
Sesquicarbonate, bgs., c.l., works, 100 lbs. 2.35 - —
l.c.l., dlvd, zone 1 100 lbs. 4.10 - 4.35
zone 2 100 lbs. 4.35 - 4.60
zone 3 100 lbs. 4.75 - 4.90
zone 4 100 lbs. 5.35 - 5.60

Sales zones are: (1) Atl. States E. of Miss., R. and N. of south bound of Ky. and Va., Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones: Davenport, Ia., and St Louis; (2) Ark E. of 98° Ga.; Iowa (except Davenport), Minn., Mo. (except St. Louis), Neb. E. of 98° N. C., S C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 5.00 - —
l.c.l., works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
l.c.l., works 100 lbs. 5.85 - —
Silicate, liq., 40° Be, 1:3.2, turbid, dms., c.l., works 100 lbs. 1.45 - —
t.c.l., works 100 lbs. 1.80 - 2.30
tanks, works 100 lbs 1.10 - —
47° Be turbid, 1:2.9, dms., c.l., works 100 lbs. 2.10 - —
t.c.l., works 100 lbs. 2.70 - 2.95
tanks, works 100 lbs. 1.75 - —
52° Be, turbid 1:2.4, dms., c.l., works 100 lbs. 2.45 - —
t.c.l., works 100 lbs. 2.80 - 3.30
tanks, works 100 lbs. 2.10 - —
solid, 1:3.2, bgs. works con.62.50 - —
Silicofluoride, bgs., c.l., works lb. .075 - —
t.c.l., works lb. .079 - —
Sodium silicofluoride in dms., 0.4c per lb higher.
Stannate, dms., works, frt. alld. E lb. .629 - .683
Sulfa drugs (see Sulfa name)
Sulfanilate, bbls., works lb. .22 - —
Sulfate, NF VII, dried, powd., dms lb. .22½- —
tech., anhyd., bgs., c.l., dlvd. E ton.52.00 - —
detergent, rayon grade, bgs., c.l., works ton.34.00 - —
bulk, c.l., works ton.31.00 - —
USP, cryst., fib. dms lb. .17½- .18
gran., fib dms lb. .17½- .18
Sulfhydrate, flake, 70-72%, dms., c.l., works lb. .06¾- —
t.c.l., works lb. .07¾- —
liq. 40-44% tanks, works, 100% basis ton.120.00 - —
Sulfide, flake dms., c.l., works, E., frt. equald lb. .05½- —
t.c.l., same basis lb. .06½- —
fused bbls., c.l. works E., frt. equald lb. .05 - —
t.c.l., same basis lb. .06 - —
Sulfite, anhyd., bgs., c.l. 100 lbs. 3.25 - —
t.c.l., same basis 100 lbs. 3.75 - —
Sulfocyanide, CP (see Sodium thiocyanate)
Tetraborate (see Borax)
Tetrasulfide, liq., 40%, dms., c.l., c.l., works lb. .04 - —
t.c.l., works lb. .05 - —
Thiocyanate, CP, dms lb. .55 - .65
tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
less than ton lots, works lb. .357 - —
Thiosulfate, NF, cryst., bbls lb. .13½- —
tech (see Sodium hyposulphite).
Titanate, ctns, c.l. works lb. .10½- —
5-ton lots, works lb. .10¾- —
1-ton or less works lb. .11 - —
Toluene sulfonate, dms., c.l. or t.l lb. .38 - —
l.c.l. lb. .42 - —
Trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E lb. .37½- —
t.c.l., frt adjusted, E lb. .39½- —
50-lb. dms., c.l. frt. alld. E. lb. .38 - —
t.c.l., frt adjusted E lb. .40 - —
10-lb. cns., c.l., frt. alld E lb. .44 - —
t.c.l. frt adjusted E lb 46 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c per pound higher.
Tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.87½- —
l.c.l., same basis 100 lbs 8.27½ 8.87½
Trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.65 - —
t.c.l. works 100 lbs 9.40 9.80
dms., c.l., works 100 lbs. 9.05 - —
t.c.l. works 100 lbs 9.80 -10.40
Tungstate, tech., kgs. dlvd. E lb. 2.15 - —
Sodium-ammonium phosphate, bbls., works, frt. equald lb. .23 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
t.c.l., same basis lb. .21½- —
Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works lb. .28 - —
smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high flash, tanks, frt. equald gal. .31 - .32
petroleum (see Petroleum solvent, partial aromatic)
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .32 - —
10,000 to 20,000-lb. lots, works. lb. .34 - —
smaller lots, works lb. .37 - .39
Tristearate, fib. dms., 20,000-lb. lots, works lb. .33 - —
10,000 to 20,000-lb. lots, works. lb. .35 - —
smaller lots, works lb. .38 - .40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
1 to 5-ton lots, works. lb. .25 - .26
powd., dms., 1 to 5-ton lots, works lb. .38 - .39
soln., coml., aqueous, dms., c.l., works lb. .24¼- —
ton lots, works lb. .25 - —
smaller lots, works lb. .25¼- —
tanks, works lb. .23¼- —
reg. 70% aqueous, dms., c.l., works lb. .16 - —
ton lots, works lb. .16¾- —
smaller lots, works lb. .17 - —
tanks, works lb .15 - —
ton.45.00 - —
Soybean meal, 44% bulk, Decatur, ton.47.00 -47.50
protein, chemically isolated, bgs., c.l., works lb. .23 - —
mechanically refd., bgs., l.c.l., works lb. .066 - —
Sparteine sulfate, cns oz. .80 - .90
Spearmint leaves, dom., bls lb. .75 - —
Spruce extract, liq., reg. tanks, works lb. .01¾- —
powd., super, bgs., c.l., works lb. .05¼- —
l.c.l., works lb. .05¼- —
Squill, white, bls lb. .16 - .18
powd., bbls., bxs lb. .17 - .20
St. John's bread, edible, bls lb. .13 - .18
Stannic chloride, anhyd., dms., works lb. .846 - .856
Oxide, dms., dlvd. E lb. 1.15½- 1.16½
Stannous chloride, anhyd., dms., works lb. .988 - 1.483
hydrous, cryst., dms., works, lb. .86 - .87
Sulfate, dms., works lb. 1.04 - 1.06
Starch, corn, pearl, paper bgs., c.l., 100 lbs. 7.27 - —
t.c.l. 100 lbs. 7.42 - —
powd., paper bgs., c.l. 100 lbs. 7.39 - —
t.c.l. 100 lbs. 7.44 - —
Prices for corn starch in cotton bags, 15c. per 100 lbs. higher.
Potato, dom, Idaho, bgs., c.l., works lb. .06 - —
Maine, bgs., c.l., works lb. .06¼- —
ex whse, N. Y. lb. .08¼- .09¼
Rice, bgs., t.c.l. lb. .15½ .16
Wheat, bgs lb. .08½- .09
Star root (see Helonias root).
Stargrass Root (see Aletris root).
Stavesacre seed, bgs lb. .60 - .61
Stearine oleo (see Oleostearine).
Stramonium leaves, bgs lb .18 - .20
Soybean meal, 44%, bulk, Decatur.
Streptomycin hydrochloride, bulk, gram. .07 - .0750
Strontium bromide, NF, cns., dms. lb. .80 - 1.05
Carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
1-ton lots, works lb. .37 - —
tech., dms., works lb. .19 - —
Chromate, bbls., works lb. .46 - —
Iodide, pars, 25-lb. lots lb 3.42 - —
Nitrate, bbls., c.l., works 100 lbs 11.00 - —
l.c.l., works 100 lbs 12.00 - —
Salicylate, NF, dms lb. 1.78 - —
Sulfate, air floated, 90%, 325 mesh, bgs., works ton.56.70 -66.15

Strophanthin, K., bots. oz.25.00 -25.50
G. (see Ouabain, USP).
Strophanthus seed, Kombi, biologically tested, bgs lb 3.50 3.75
Styrax, USP cs lb .78 .80
Styrene monomer, polymer grade, 99½% dms. c.l. frt. alld. lb. .22½- —
t.c.l. same basis lb. .23½- —
tanks, same basis lb. .21½- —
synthetic rubber grade, 99% dms. c.l. frt. alld lb. .18 - —
l.c.l. same basis lb. .19½- —
tanks, same basis lb. .16 - —
Styrolyl acetate, bots lb. 1.45 1.70
Sucrose, refd., white, bgs., refy., E lb. .0885- —
Octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works lb. .76 - —
Sugar (see Sucrose).
Sulfabenzamide, dms lb 4.00 4.50
Sodium dms lb 4.10 4.60
Sulfacetamide fib. dms lb 4.00 4.20
USP, same basis lb. 5.00 - 5.20
Sodium fib dms lb 5.00 5.20
USP, same basis lb. 5.20 - 5.40
Sulfadiazine USP, microcrystals, dms lb.10.60 -11.10
powd. dms lb.10.25 -10.75
Sulfadiazine-sodium USP dms lb.11.25 -11.75
microcrystals, dms lb 11.60 -12.10
Sulfaguanidine USP dms lb 2.50 —
Sulfamerazine USP, microcrystals, lb.10.65 -11.15
Sulfamerazine-sodium, USP dms, lb.11.25 -11.75

Sulfamethazine microcrystals, dms., lb 8.90 9.40
powd., dms lb 8.50 9.00
Sulfanilamide USP 30-80 mesh, dms lb 1.40 1.60
microcrystals, dms lb 1.70 1.90
powd. dms lb 1.30 1.50
Quinoxaline, veterinary, dms lb 6.40 6.75
Sulfapyridine NF powd. bots. tins lb 7.00 7.50
Sulfapyridine-sodium monohydrate, dms lb 7.50 8.00
Sulfathiazole, NF, microcrystals, dms lb 2.85 3.00
powd. dms lb 2.50 2.65
Sulfathiazole-sodium, USP dms lb 2.75 2.90
Sulfur, coml., flour, bgs., mines, 100 lbs. 2.55 - —
bbls., mines 100 lbs 3.30 - —
lump, bgs., mines 100 lbs 2.45 - —
bbls., mines 100 lbs. 2.90 - —
crude, bulk, c.l., mines, contract, long-ton.26.50 - —
export, f.o.b vessels, Gulf ports long-ton.28.00 - —
domestic and Canada, f.o.b vessel Gulf port long-ton.28.00 - —
refd., flowers, USP, bgs., mines 100 lbs. 4.25 - —
bbls., mines 100 lbs. 5.50 - —
flour, light, bgs., mines 100 lbs. 3.85 - —
bbls., mines 100 lbs. 4.75 - —
lump, bgs., mines 100 lbs. 3.35 - —
rolls, bgs., mines 100 lbs. 4.10 - —
bbls., mines 100 lbs. 4.65 - —
salt block, bbls., mines 100 lbs. 3.75 - —
virgin block, bbls., mines 100 lbs. 3.70 - —

How Pennsalt helps **caustic soda** users

plan for tomorrow

By bringing you the latest word on buying and handling caustic soda,

Pennsalt gives you the jump on tomorrow's competition

As a major producer of caustic and many other basic chemicals, Pennsalt *must* know and does know the day-to-day developments in technology and markets affecting the caustic picture. ALL USERS OF CAUSTIC SODA, large and small, can learn a lot, *be saved a lot*, for their tomorrows through Pennsalt's new free counseling service. Pennsalt has answers to questions you may not even think of asking. How does this service, given today, keep you ahead of the game tomorrow? . . .

. . . through guidance in purchasing
You may be able to cut caustic costs considerably by changing grade, container, volume, purchasing schedule, or storage facilities. Pennsalt will help you decide what's best for you.

. . . through advice in handling and traffic
What's the safest, most economical method *for you* to handle caustic and other heavy chemicals? How to unload, dilute, store, pump, etc.? Materials for tanks, pipes? Pennsalt has the answers for you—free.

TRY US TODAY! Ward off, with Pennsalt's help, the unseen difficulties even the wisest caustic user encounters—let Pennsalt help you keep on top of your technical and purchasing problems before tomorrow comes! There's no obligation to you in calling the nearest Pennsalt office, or sending the coupon below.

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Pennsalt Chemicals

INDUSTRIAL CHEMICALS DIVISION

PENNSYLVANIA SALT MANUFACTURING COMPANY
Three Penn Center Plaza, Philadelphia 2, Pa.

Appleton, Wis.—Regent 3-9307
Chicago 1, Ill.—Andover 3-6170
Cincinnati 2, Ohio—Main 1-3168
Cleveland 2, Ohio—Main 1-6205
Decatur, Ga.—Evergreen 5064
Detroit 26, Mich.—Woodward 1-8051
Paterson 1, N. J.—Lambert 5-3500
Philadelphia 2, Pa.—Locust 4-4700
Pittsburgh 19, Pa.—Atlantic 1-5233
St. Louis 1, Mo.—Central 1-2338
Tacoma 2, Wash.—Market 9101

Industrial Chemicals Division
Pennsylvania Salt Manufacturing Company
Three Penn Center Plaza
Philadelphia 2, Pa.

Please send a representative to discuss with me our company's plans for tomorrow involving heavy industrial chemicals.

Name.....Title.....
Company.....
Address.....
City.....Zone.....State.....

Sulfur—1,1,1-Trichloroethane

Sulfur, rubbermakers, coml., reg. bgs., mines 100 lbs. 2.65 - —
bbls., mines 100 lbs. 3.80 - —
98-100% passing through 325 mesh, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs. 3.90 - —
refd., bgs., mines 100 lbs. 3.50 - —
bbls., mines 100 lbs. 4.55 - —
treated 2.5% mineral oil, bgs., mines 100 lbs. 2.95 - —
bbls, mines 100 lbs. 4.10 - —
Dichloride, dms., c.l., works, frt. equald lb. .04 - —
l.c.l. same basis lb. .04¾ - —
tanks, same basis lb. .03¾ - —
Dioxide liq., coml., cyls. works, frt. equald lb. .10 - .12
multi unit cars, works lb. .0535 - —
tanks, works lb. 045 - —
refrigeration, 150-lb. cyls., dlvd. lb. .30 - —
Monochloride, 55-gal. dms., c.l., frt. equald lb. .04 - —
l.c.l. same basis lb. .04¾ - —
tanks, same basis lb. .03¾ - —
Sumac leaves, 28% tannin, bgs., ex-dock ton.130.00 - —
ground, bgs., ex-dock ton.130.00 - —
Superphosphate, run-of-pile, under 22% a.p.a pulv., bulk, c.l., Balto., unit-ton. .88 .91
Carteret, N. J unit-ton. .88 .91
triple 48% or more, a.p.a., pulv., bulk c.l., East Tampa, Fla. unit-ton .98 —

T

2,4,5-T dms. c.l., works, frt. equald. lb 1.18 - —
l.c.l. same basis lb 1.25 - —
Isopropyl ester, dms., c.l., works, frt. equald lb 1.24 - —
l.c.l., works lb 1.29 - —
Talc, dom. ord. Calif. grd., bgs. c.l., works ton.33 00 -39.50
Vermont off color grd., bgs. c.l., works ton 19.40 - —
l.c.l., works ton 37 00 - —
fibrous, New York, grd., bgs., c.l., works ton 28.00 - —
l.c.l., works ton 31 00 -36.00
99 5% 325 mesh, bgs. c.l. works ton 31 00 - —
l.c.l., works ton 34.00 - —
99 95% micronized, bgs. works ton.38 00 - —
tmp Canadian grd. bgs., c.l., mines ton 20 00 25 00
Tallow, edible, tanks, dlvd lb. .13½ - —
inedible, extra, tanks, dlvd lb. .08 - .08⅛
fancy, bleachable tanks, dlvd., lb. .08¼ - —
guaranteed, dms., f.a.s. lb. .09¾ - —
No. 1, tanks, dlvd lb. .07⅛ - .07¼
special, tanks, dlvd lb. .07¾ - —
sulfonated, 25%, bbls., l.c.l lb. .08¾ - .09
50%, bbls., l.c.l lb. .09¾ - .10¼
Tankage, animal, feeding, 9-11% ammonia, bulk unit-ton. 5.00 - —
Chicago, bulk unit-ton. 5.00 - —
Tapioca flour, Brazilian, bgs., ex whse lb. .10¼ - .11
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .47 - .49
l.c.l., same basis gal. .50 - .51
tanks, same basis gal. .39 - —
25-28%, dms., c.l., same basis. gal. .54 - .56
l.c.l., same basis gal. .57 - .58
tanks, same basis gal. .46 - —
50-53%, dms., c.l., same basis. gal. .70 - .72½
l.c.l., same basis gal. .73½ - .74½
tanks, same basis gal. .62½ - —
Coal (see Coaltar).
Tartar, emetic (see Antimony-potassium tartarate).
Terpine glycol ether, dms., c.l., works lb. .23½ - —
l.c.l. works lb. .25½ - —
tanks, works lb. .22 - —
Hydrate, NF, cryst., powd., fib. dms lb. .67½ - .74
Terpinol, dms., l.c.l., dlvd E lb. .23¾ - —
extra, dms lb. .41 - .60
prime, dms lb. .30 - .45
Terpinyl acetate, extra, cns. dms. lb. .60 - .75
prime, dms lb. .55 - .70
Propionate, dms lb. 1.75 - 2.00
Terra alba (see Gypsum)
Testosterone, USP, 100-gm. lots, bots gram. .70 - —
Propionate, USP, 100-gm. lots, bots gram. .68 - —
Tetrachloroethane, dms. works lb. .14½ - —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene, tech (see Perchloroethylene).
USP 55 gal. dms., works lb. .20½ - .21½
smaller dms., works lb. .23½ - .25
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .61½ - —
l.c.l., dlvd. E lb. .62½ - —
Pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .49 - —
l.c.l., dlvd. E lb. .50 - —
tanks, dlvd. E lb. .47 - —
Tetrahydrofuran, dms, c.l., or t.l., works lb. .36½ - —
l.c.l., or t.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrapotassium phosphate (see Potassium phosphate).
Thallium metal, dlvd lb.12.50 -15.00
Sulfate 99% bots. dlvd lb. 8.00 -13.00
Theobromine, NF, fib. dms. lb. 4.00 - —
And sodium acetate USP, fib. dms lb 4.00 - —
Sodio-Salicylate, NF, fib dms lb 3.30 - —
Theophylline, anyhd or USP, 100-lb. dms lb 3.65 - —
Thiamine hydrochloride, USP regular fib dms kilo.60.00 - —
ampule grade, fib. dms kilo.62.00 - —
Mononitrate, USP fib dms kilo 62 00 - —
Thiocarbanilide, dms. ton lots lb 72 - —
less tons lots lb. 74 - —
Thiodiphenylamine (see Phenothiazine)
Thiourea, tech., bgs., t.l., frt. alld. lb. .33 - —
l.c.l., frt. alld lb. .35 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works lb. 3.50 - —
dl-Threonine bots., 1-kilo lots. kilo.450.00 500.00
Thymol, fib. dms lb. 2.50 - 2.75
Iodide, NF, dms. lb. 7.30 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhydrous).
crystals (see Stannous chloride, hydrous).
Oxide (see Stannic oxide).
Metal (Straits) lb. 1.12¼ - —
Sulfate (see Stannous sulfate).
Tetrachloride anhyd., (see Stannic chloride, anhydrous).
Titanium dioxide anatase, chalk-resistant, bgs., c.l., dlvd lb. .24½ - —
l.c.l., dlvd. lb. .25½ - —
ceramic, bgs., c.l., dlvd. lb. .22½ - —
l.c.l., dlvd. lb. .23½ - —
reg., bgs., c.l., dlvd lb. .22½ - —
l.c.l., dlvd lb. .20½ - —
metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla ton.120.00 - —
Niagara Falls, N. Y., c.l., ton.137.50 - —
5-ton lots ton.142.50 - —
ton lots ton.147.50 - —
rutile nonchalking, bgs., c.l., dlvd. E lb. .26½ - —
l.c.l., dlvd. E. lb. .27½ - —
Milled titanium dioxide, $7.50 per ton higher.
Hydride, cns., works lb. 7.95 - 9.00
Pigment, calcium-rutile base, reg., bgs., c.l., dlvd lb. .09¼ - —
l.c.l., works lb. .09¾ - —
high-tinting, dms., c.l. lb. .09 - —
l.c.l. lb. .09½ - —
Tetrachloride, tech., dms., c.l., works lb. .40¾ - —
l.c.l., works lb. .43¾ - —
tanks, works lb 39¾ - —
dl-a-Tocopherol, bots kilo.134.20 - —
Acetate kilo.122.00 - —
dry kilo.31.00 - —
Acid succinate kilo.165.00 - —
o-Tolidine, base, paste, kgs., 100% basis lb. 1.35 - —
dry, kgs., 100% basis lb. 1.40 - —
Hydrochloride, paste, kgs., 100% basis lb. 1.35 - —
Tolu balsam, cns lb. 4.85 - —
Toluene (see Toluol).
p-Toluenesulfonamide, powd., dms., works lb. .70 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
l.c.l., same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .23 - —
l.c.l., same basis lb. .24 - —
tanks, same basis lb. .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
solid, dms., frt. alld lb. .60 - .61
Toluol, coaltar, indust. or nitration, tanks, works:—
Bethlehem, Pa gal. .32 - —
Birmingham dist gal. .32 - —
Chicago, dist gal. .32 - —
Cleveland dist gal. .32 - —
Geneva, Utah gal. .26 - —
Johnstown, Pa gal. .32 - —
Lackawanna, N. Y. gal. .32 - —
Lone Star, Tex gal. .33 - —
Lorain, Ohio gal. .32 - —
Middletown, Ohio gal. .33½ - —
Minnequa, Colo. gal. .32 - —
Philadelphia dist gal. .32 - —
Pittsburgh dist gal. .32 - —
Sparrows Point, Md gal. .32 - —
Terre Haute, Ind gal. .35 - —
Youngstown, Ohio gal. .32 - —
Petroleum, indust., 2°, tanks, works:—Albany, N. Y gal. .35 - —
Bayonne, N. J gal. .34 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Detroit, Mich gal. .35 - —
Houston, Tex. gal. .33 - —
Philadelphia, Pa. gal. .34 - —
Providence R. I. gal. .35 - —
Wood River, Ill. gal. .34 - —
2,4-Tolylenediamine, cryst., fib. dms., c.l., frt. alld lb. .97 - —
l.c.l., frt. alld lb. 1.00 - —
powd., fib. dms., same basis lb. 1.04 - —
Tonka beans, Angostura, cks. lb. No prices.
Brazilian, Surinam, cs lb. 1.35 - —
Totaquine 100-oz. lots, cns oz. .42 - —
Toxaphene, dms., c.l., t.l., works lb. .21 - —
l.c.l., l.t.l., works lb. .27 - —
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 - —
l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .42½ - —
l.c.l., frt. alld. E. of Denver. lb. .43½ - —
tanks, frt. alld. E. of Denver. lb. .40 - —
Phosphate, dms., c.l., works lb. .52½ - —
l.c.l., same basis lb. .53½ - —
tanks, same basis lb. .50 - —
Tributylamine, dms., c.l., works lb. .67½ - —
l.c.l., same basis lb. .68½ - —
tanks, same basis lb. .65 - —
Trichlorobenzene, dms., c.l., frt. alld. E. lb. .14½ - —
l.c.l., frt. alld. E. lb. .15½ - —
tanks, frt. alld. E. lb. .13 - —
Trichlorobenzene prices in the West 1¾c. higher.
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .12½ - —
l.c.l., dlvd. E. lb. .14½ - —
tanks, works, frt. equald lb. .11¼ - —
1,1,1-Trichloroethane, dms., c.l., works lb. .13½ - —
l.c.l., works lb. .14¼ - .16¼
tanks, works lb. .11½ - .12½

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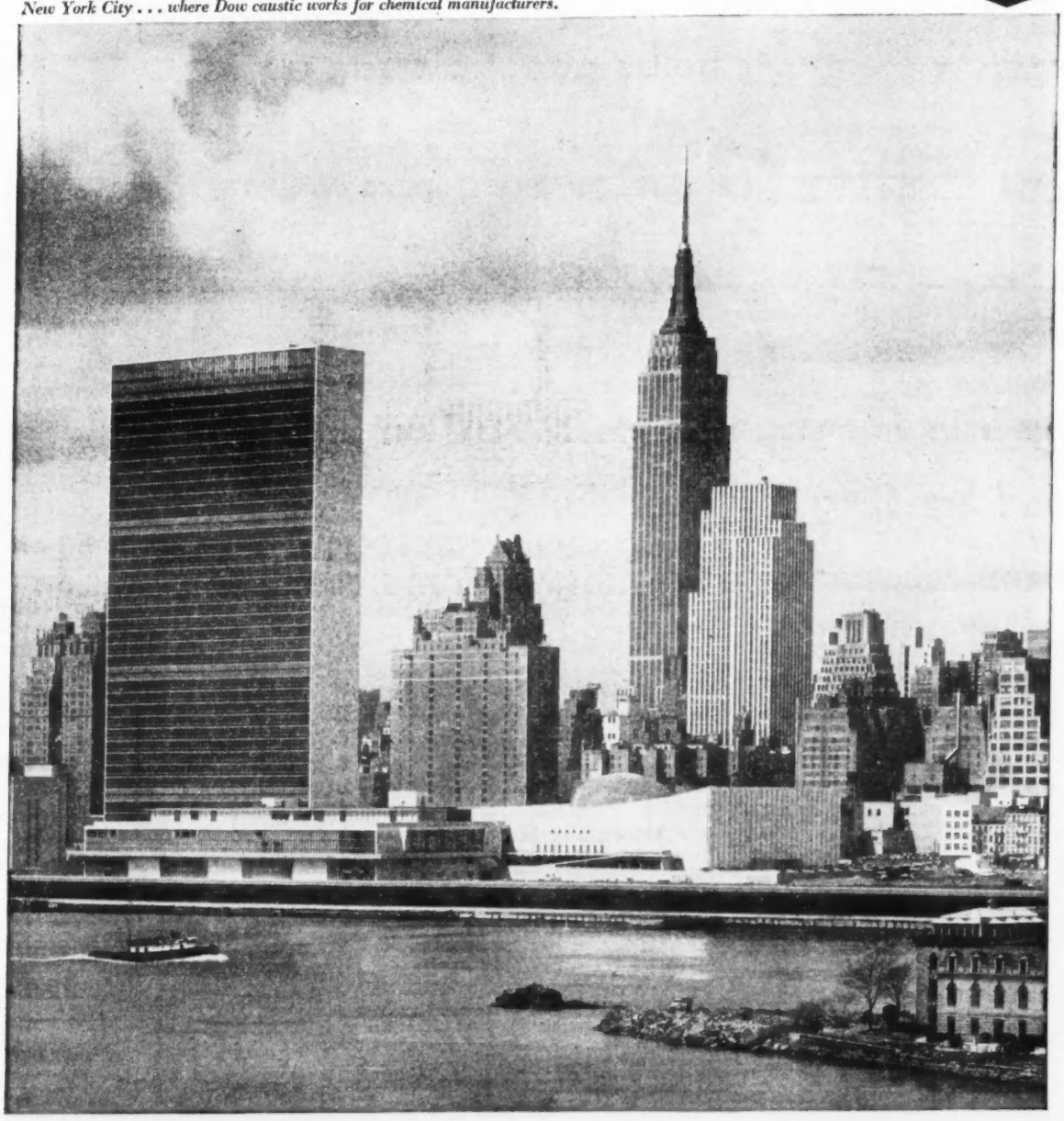

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Tricholine citrate, 85% soln., ret. chys works, frt adjusted lb 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .37 - —
t.c.l. dlvd lb. .38 - —
tanks, dlvd lb. .34½ - —
petroleum, dms., c.l., dlvd lb. .36½ - —
t.c.l. dlvd lb. .37½ - —
tanks, dlvd lb. .34½ - —
Triethanolamine, dms., c.l., dlvd, E lb. .24½ - —
t.c.l., same basis lb. .25½ - —
tanks, same basis lb .22 - —
Triethylamine, dms., c.l., works, dlvd E lb. .49 - —
tanks, same basis lb. .46½ - —
Triethyl citrate, refd, tech., non-ref dms, c.l, frt alld E, of Denver lb. .45¾ - —
t.c.l. frt alld E of Denver, lb. .46¾ - —
tanks frt alld E of Denver, lb. .43¾ - —
Phosphate, dms,. c.l. dlvd .40½ - —
t.c.l. dlvd lb. .41½ - —
tanks same basis lb. .38 - —
Triethylene glycol dms, c.l. dlvd, E lb. .21 - —
t.c.l., same basis lb. .22 - —
Triethylenetetramine, dms., c.l., dlvd E lb. .51½ - —
t.c.l., dlvd. E. lb. .52½ - —
tanks, dlvd. E. lb. .49 - —
Tri-isopropanolamine, dms., c.l., dlvd E lb. .23¾ - —
t.c.l., dlvd E lb. .24¼ - —
tanks, dlvd E lb. .20¾ - —
Trimethylamine 25-40% soln. dms., c.l. works, frt equald., 100% basis lb. .42 - —
t.c.l. works frt equald, 100% basis lb .42½ - —
tanks works frt equald, 100% basis lb .33 - —
Trioxane pure dms. c.l. t.l. dlvd, E lb. .50 - —
t.c.l., dlvd. E. lb. .51½ - —
Tripentaerythritol bgs., t.c.l., works lb. .35 - -
Triphenyl phosphate bbls. c.l., frt. equald lb. .40 - —
t.c.l., frt. equald lb. .41 - —
Triphenylguanidine bbls., works lb .90 - —
tanks same basis lb. .18½ - —
Tripropylene glycol dms., c.l., frt. alld E lb. .20½ - —
t.c.l. frt alld. E lb. .21½ - —

Tripopylene glycol prices 1c. per lb. higher in West.

Phosphate (see Sodium phosphate tribasic).

Tyrothricin, USP bots gram .75 - .85
dl-Tryptophane, fib ctns., works, kilo 165 00 —
Tungsten metal powd. 2-5 microns, dms., works lb. 4.20 - —
Turpentine, gum (see Protective Coatings market, Naval Stores)

U

Unicorn root, false (see Helonias root)
True (see Aletris root)
Urea 46% N. indust., bgs., c.l., t.l., dlvd E ton 120 00 - —
t.c.l. dlvd E, ex whse ton 140 00 - —
45% N agricultural, bgs., c.l., (30 tons) dlvd. E ton 105 00 - —
Urea ammonia liquor A and B grades N basis, tankcars, Belle, W Va ton 126 00 - —
C grade, tankcars, same basis, ton 124.50 - —
37 grade, tankcars, same basis, ton 153 00 - —
Urethane USP dms lb 1 45 - —
Uva-ursi leaves bls lb 12 - .14

V

Valerian root, Belgian, bgs lb. .25 - —
Indian, bgs. lb. .27 - —
dl-Valine, dms., works lb 21 00 - 27 50
Valonia beards, 40-42% tannin, bgs., ex dock ton 86.00 - —
cups, 28-30% tannin bgs, ex dock ton 64.00 - —
extract, powd., 63% tannin, bgs., exdock, duty extra lb. .09¾ - —
Vanadium pentoxide tech., dms., works lb 1 28 - 1.33
Vanilla beans, Bourbon, tins lb. 7.50 - —
Mexican, cuts, tins lb. 7.50 - —
whole, tins lb. 8.00 - —
Tahiti, cs lb. 7.00 —
Vanillin ex eugenol, tins, 25-lb lots lb 6.50 - 6.75
smaller lots lb 6 90 - 7.25
ex lignin, dms., 100-lb. lots lb. 2 75 - —
smaller lots lb 2 80 - 2.85
Vinyl acetate monomer, 55-gal dms., c.l., dlvd. E lb. .19 - —
t.c.l., dlvd. E. lb. .20 - —
tankcars, dlvd. E lb. .16½ - —
tanktrucks less than 4,000 gal., dlvd E lb. .17½ - —
n-Butyl ether, tech., dms., c.l., works lb. .28 - —
t.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Chloride monomer, tanks, works lb 11 - .12
Ether, USP, anesthesia, bots., 50 c.c., hospitals bot. 1.12 - —
75 c.c. bot. 1.56 - —
tech., dms., c.l., works lb. .26 - —
t.c.l., works lb. .28 - —
tanks, works lb. .25 - —
Isobutyl ether, tech., dms., c.l., works lb. .28 - —
t.c.l. works lb. .30 - —
tanks, works lb. .27 - —
Methyl ether, cyls., works lb. .23 - —
tanks, works lb .20 - —

Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made

Propionate monomer, dms., c.l., dlvd lb. .49 - —
t.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Trichloride (see Trichloroethane)
2-Vinylpyridine, 10 dms to tanks, works lb. 1.36 - —
1 to 9 dms., works lb. 1.50 - —
tanks, works lb. 1.33 - —
Vinyltoluene, dms., c.l., frt. alld lb. .18½ - —
t.c.l., frt. alld. lb. .19½ - —
tanks, frt. alld. lb. .16 - —
Viosterol in nat. vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units. .02½ - .04¾
Vitamin A acetate, syn., crystalline, beads 500,000 A units per gram, gram .07¼ - —
dry 500,000 units per gram, kilo lots kilo 67.50 - —
325,000 units per gram, same basis kilo 43 88 - —
250,000 units per gram, same basis kilo 33 73 —

Dry vitamin A acetate in less than kilo lots $2.50 per kilo higher in all potencies

liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Palmitate liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 - —
in oil 1,000,000 A units per gram 1,000,000 units .10 - —
B, (see Thiamine hydrochloride).
B_2 (see Riboflavin)
B complex natural (see Rice bran concentrate and Yeast)
B_{12} crystalline, 1-gram or 5-gram vials gram 245.00 - —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram 185.00 - —
C (see Acid ascorbic)
D (see Oils, codliver and fish-liver Calciferol, and Viosterol)
D_2 dry 850,000 units per gram, kilo lots kilo 42.50 - —
less than kilo lots kilo 45 00 - —
E (see a-Tocopherol and Oil, wheat germ)
G (see Riboflavin)
H (see Biotin)
K Active (see Menadione)
K, 25 gram bots gram 4.50 - —
Violet methyl toner (see Blue methylviolet toner)
V.M.&P. naphtha (see Petroleum naphtha)

W

Wahoo root, bark, bls lb 2.25 - —
Warfarin 0.5% dms., 50-lb lots, dlvd lb 1.95 - —
25-49 lb lots, N Y or Chicago lb 2 05 - —
5-24-lb lots, cns, N Y or Chicago lb 2.15 - —
Wattle bark, fair average, African bales, ex dock ton 95 00 - 96 00
merchantable bales, ex dock ton 91 00 - 92 00
Wattle extract, liq., 35% tannin, bbls., lb. .08¼ - .08½
solid E Africa 60% tannin, bgs, ex dock, duty extra lb. .09⅞ - —
S Africa, 60% tannin, bgs., ex dock, duty extra lb. .10 - —
Wax, amorph (see Wax, micro crystalline)
Bayberry, bgs lb. .45 - .47
Bees, crude, African, bgs lb. .72 Nom.
Brazilian, bgs lb. .75 Nom.
Central American, bgs lb. .68 Nom.
Chilean, bgs lb. .75 Nom.
refd., USP, bleached, white bricks, 100-lb. ctns lb. .80 - .82
slabs, 100-lb. ctns lb. .79 - .81
yellow, bricks, 100-lbs. ctns. lb. .71 - .73
slabs, 100-lb. ctns lb. .70 - .72
Candelilla, crude, bgs lb. .70 - .71
refd., bgs lb. .73 - .74

Powdered candelilla: 20 to 100 mesh, 7c higher.

Wax, carnauba, chalky, bgs., ton lots lb. .66 - .67
North country No. 2 crude, bgs, ton lots lb. .74 Nom.
No. 3, Ceara, crude, bgs., ton lots lb. .68 - .69
refd pure, bgs, ton lots lb. .75 - .77
tech., bgs., ton lots lb. .69 - .71
Parnahyba, crude, bgs, ton lots lb. .69 - .70
refd pure, bgs, ton lots lb. .76 - .78
yellow No. 1, Ceara, bgs., ton lots lb. 1.43 - 1.45
Parnahyba, bgs, ton lots lb. 1.46 - 1.48

Powdered carnauba wax price differential same as powdered candelilla

Japan, cs lb. .49 - .50
Microcrystalline, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Montan, dom., refd., bgs lb. .29 - .30
imp., crude, Bohemian, bgs lb. .26 - .28
German, bgs lb. .35 Nom.
Ouricury, refd., pure, bgs lb. .89 - 91
tech., bgs lb. .83 Nom.
Paraffin (see P).

—Continued on page 66

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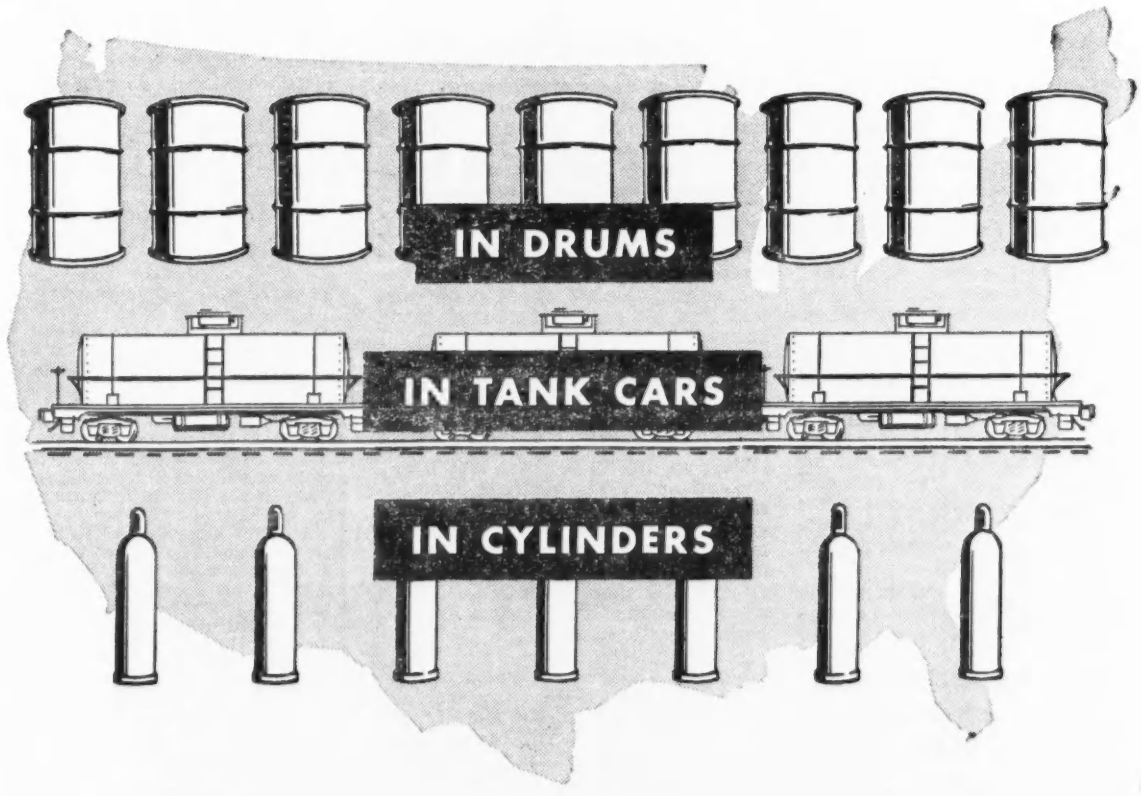
for consistently high purity



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Standardization and Competition

In its expanding endeavor to find something new to concentrate upon functionally—there are those who say that it's all a boosting of the professed need for more funds to get more operators—the antitrust division of the Department of Justice, having pretty well played out the publicity potentialities of mergers, is being suspected of at least looking in the direction of the effects of product standardization in restraint of trade. There is a bit of substantiation for such a belief; but there is no reason to believe that the agency regards standardization to be, of itself, in violation of section 1 of the Sherman act. Its interest has to do with the use of standards to block competition or to hamper desirable development of economic progress commercially.

There are many among those prominently interested in the creating of standards and the adoption of standardization programs who know that those objectives can be integrated into practices violative of the laws against restraint of trade. That is true of many things which are not of themselves thus or otherwise illegal. They are fully in agreement with those who contend that the application and acceptance of standards can, even does, hamper industrial progress. But, they make it clear and emphatic that such an effect is attributable to contentment or complacency with reference to the existence of standards and not to that existence alone. They are fully aware that the drug industry in this country has had official standards for well over a century, and that those standards have had a federal statutory status for a half century. But, they ask, can anybody say that the drug industry has not been progressive? That is because it has always regarded standardization as a progressive objective.

A very informative commentary on the status of standardization in relation to the antitrust laws was given last month by an enforcement official of the departmental agency at a district meeting of members of the National Association of Purchasing Agents, which has long been a proponent of standardization. He made it clear that the division does not consider standardization illegal but does believe that it has potentialities of illegal application. One point especially stressed by the speaker was based on a statement in the NAPA "Standardization Manual" with reference to the urging of suppliers to standardize, pointing out to them these disadvantages of the absence of standardized parts:—"(1) contributes to further diversification, (2) contributes to continued high costs, and (3) is an attractive invitation to competition."

Commenting particularly upon the third "disadvantage," the speaker suggested that the matter be called to the attention of NAPA headquarters, saying:—"Maybe they will leave it out of the next printing. In any event, I would not encourage suppliers to standardize by telling them failure to do so will attract competition."

In connection with the publication of the commentary—it has much to promote it as must reading—in the November 14 issue of the NAPA Bulletin, the editor thanked the speaker and said that his suggested change would be made.

One thing to be kept in mind in any consideration of the effects of standardization on competition is that the competition which is attracted by its absence is the unfair kind which skimps on quality in order that it can shave the price. The influence of standardization is on the fair side of the incompatible objectives of the antitrust laws—to make competition both free and fair. The fair side is in every way by far the more desirable. Hence, standardization is promotive of competition as it should be.

Looking at the Labor Law

No doubt it wil be some time before there is general availability of data on the Secretary of Labor's tryout in the direction of getting useful advice on what to do to make the Taft-Hartley act more acceptably, perhaps more effectively, operative. The tryout was staged last week in consequence of a campaign promise to the construction industry. As there have been no similar promises in other fields, it must be assumed that the secretary wanted to learn how—or if—the idea would work before giving it wider application.

The construction industry tryout was made with executives of three large labor unions in the field and of three national organizations of employers in the industry. Obviously it was, therefore, confined to areas of commercial economics, aside from the initiative concern from the political area. The advisory group included no representation of the social economic areas involved, although it is there that the impacts of the disruptions at which the labor relations law is somewhat directed can be and often are most objectionable in any respect.

As a matter of public welfare, which should be of prime consideration in every policy and practice of a government for the people, the need for revision of the Taft-Hartley act is a fundamental one. The statute should be concerned at least as much with labor responsibilities as it is with labor relations. It should provide full, effective protection for the public against any consequences deriving from the reactions of either labor or management to unsatisfactory conditions in their relations. The public is not at fault in that connection. Why should the consequential penalties fall most seriously upon it?

The primary purpose of any statute having to do with what are popularly styled labor troubles should be to keep those troubles away from the public, to prevent any interference with the service of the public in such imperatively necessary things as food, heat, light, and transportation. Such a law should clearly define the responsibilities of labor and management in terms of public welfare. It should provide definitely and effectively for acceptance of and adherence to those responsibilities, setting up a federal agency to deal with determinatively with any controversy which in any way tended to threaten the maintenance of those responsibilities, in collaboration with a similarly purposed and empowered agency of a state in which such action was needed.

The biggest need for amendment, or emendment, of the Taft-Hartley act is that it be made more effective for the purpose to which all laws should be directed—the welfare of the public. That is not a job for the Secretary of Labor—or any other group. It is one of the very many which clearly substantiate the federal government's need for a real Department of Welfare—not only in health, education, and housing, but in everything that is in any way contributory to that most important public need.

A New Kind of Banking Problem

Up to a month ago, the United States Department of Agriculture had paid farmers close to $140,000,000 for participating in this year's soil bank program. It expected to pay them at least $110,000,000 more by the end of the year.

About a fortnight ago, the department reported that farm crop production this year was practically the same as that in 1955, which tied the record made in 1948—the corn crop ran 5 percent above the record.

Some day it may be possible to know exactly why the soil bank failed. Of course there will be "economists" who will contend that, just because the bank handed out a quarter-billion dollars and got no reduction of surplus production, there is no reason to consider the experiment a failure. The cost was wholly a matter of getting it started. There has not yet been time enough for it to be producing any results, let alone profitable ones. They are now declaring that there will be an end to surpluses in three years—because of the increase in population. Departmental prognosticators are also saying that farm prices will go up still more than the 2.15 percent gained thus far this year and that food prices will be higher through at least the first quarter of 1957. The existence of something like eight billion dollars' worth of surplus farm products is not a factor in the equation having to do with supply and demand in relation to prices. That accumulation is merely something awaiting disposal for the benefit of foreign countries which have agreed to pay the department about 68.2 percent of what it paid for the products—handling costs don't count.

There is a wee bit of a glimmer of hope in the expectation that some of those who have deposited acreage in the government's savings bank at quite high interest are going to raise more meat and less grain. Nobody has figured out what that might mean in relation to surplus butter. But, some are seriously predicting that the bigger crops of meat will be sold to consumers at prices higher than those now prevailing. The law of supply and demand just ain't no more.

Out of those things one can draw his own conclusions as to why this newfangled banking business—or savings and loan business — is difficult to analyze and appraise by ordinary financial methods. The only thing clear about it is that the people of this country are going to be stung as payers of taxes and as needers of foods until somebody in no way politically dependent really does get across to farmers' acceptance the somewise painful fact that the government does not owe them a living; but, that, if they will actually get into business on their own or in hookups with processing or consuming industries, they can make a good one.

Washington Talks It Over

GSA Is Ready to Give You Help With Your Problems Concerning Procurement Policies and Procedures

By Ralph L. Cherry
Chief, OPD Washington Bureau

If you have any problems connected with government procurement policies and procedures, get in touch with General Services Administration. Administrator Franklin G. Floete has just set up an interagency task force to review the whole matter of policies and procedures in this field with the view to bettering the situation.

The move grows out of a recommendation contained in the report of the Cabinet Committee on Small Business which suggested that a comprehensive review of government activities would find a number of inconsistencies and inequities that should be eliminated. Greater simplification of the work by eliminating red tape will be another aim of the group.

It is expected that the study will continue through most all of next year with a final report submitted to the President in December. Reforms and improvements will not await the submission of the report, however, as immediate action to implement specific recommendations is to be initiated whenever facts demonstrate that this will bring prompt results.

The announcenment of the formation of the task force said that the group intends to study at close hand the problems confronting business firms throughout the country as they deal with the federal government, and work closely with the principal agencies procuring supplies and construction.

Besides GSA, other departments and agencies named to the study groups are the Post Office, Veterans Administration, Interior, Commerce, Defense, Agriculture and Atomic Energy Commission.

Test on Product Promotion

A section of the Robinson-Patman act which has been relied upon by the Federal Trade Commission to keep big advertisers in line appears headed towards a court test on its constitutionality. It is section 2(d) of the law, which FTC interprets to require that if promotional allowances are given, they be made available to all competing customers on proportionally equal terms.

The question of promotional allowances and how they can be given to all customers on proportionally equal terms has been a matter that has plagued both the commission and advertisers for a number of years. The best illustration of the difficulties with this section of the law came a few years back when the FTC moved against some members of the cosmetic industry in the use of demonstrators to push the company's products. The difficulty finally was resolved through a trade practice conference.

The newest challenge to the commission's curbs on promotional allowances has come from one of the biggest factors in the cigarette industry who charges that the language of the law is so vague on this point as to violate the due process clause and is therefore unconstitutional. The matter is in its preliminary stages before the FTC so a final court ruling on the question cannot be expected for possibly several years.

Barrier Against Surpluses

That Public Law 480 has been a major aid in preventing large surpluses of fats and oils building up in this country is shown by figures just released. This law which became effective on July 1, 1954, provides a means for the export sale of US surplus farm products through private trade channels, with payment in the currency of the importing country. Exporters are paid in dollars by the Commodity Credit Corporation and the foreign currency is paid to the credit of the US government.

Exports of soybean and cottonseed oils under this in this marketing year ended September 30, 1957, totaled about 570 million pounds. Another 230 million pounds still remained to be shipped under agreements announced prior to September 30. In addition agreements announced in late October with Spain and Italy provide for an estimated 250 million pounds of edible vegetable oils.

Other items covered by agreements under this law include:—150 million million pounds of lard of which 118 million pounds were shipped through September; 80 million pounds of tallow of which 28 million pounds were shipped; and 12 million pounds of linseed oil of which 3.5 million pounds have been shipped.

Progress Report

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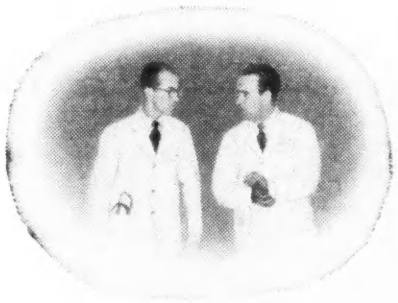

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Heavy Chemicals

The dock strike was the key factor in the chemicals market last week. The pier walkout paralyzed commerce in east coast and Gulf ports, and exporters reported business thoroughly snarled. There was some concern regarding shipments of soda ash and caustic soda overseas, because these items are among those exported in large volume. However, sellers did not appear to be worried about a possible buildup in stocks as a result of the stoppage.

A producer announced late last week that prices of its lead nitrate and lead acetate would be advanced December 1 on spot and January 1 on contract.

Price for metallic sodium in tankcars will be advanced December 10. Materials scheduled to be increased in price January 1 include boron compounds, mono and tricalcium phosphate, anhydrous sodium sulfite, and sodium silicates.

Mineral acids demand continued to be featured by heavy inquiry from the booming steel industry. Sulfuric business was good for rayon, petroleum, detergents, pigments and chemicals, but fertilizer interest continued relatively weak.

Chlorine demand remained strong. Producers were reported pushing units to capacity in an effort to keep up with incoming orders. There were no reports of any new business being taken on.

Domestic mine production of mercury during the second quarter was the highest since the first quarter of 1947, according to the Bureau of Mines.

The American Pulp and Paper Association reported production for the week ended November 17 at 95.3 percent of theoretical capacity, as compared with the revised figure of 100.1 percent for the previous week, and 100.3 percent for the corresponding week of last year.

Acid, Boric—The trade kept in mind the fact that all grades but anhydrous are slated to be advanced in price, effective on spot and contract January 1.

Acid, Chromic—Demand in the east was only moderately active. The midwestern picture was strong, however, particularly in view of heavy takings by the automotive industry for use in plating.

Inquiry in the east was said to have been adversely affected by the November 1 price rise. Buyers had ordered heavily prior to the advance. The market was expected to improve as consumers stocks became depleted.

Acid, Hydrochloric—Steel industry demand helped keep northeastern and midwestern markets strong. Interest was also well maintained by the steel complex in Alabama.

Neoprene inquiry accounted for sizable shipments and production of hydrochloric acid. Prices appeared generally stable, despite high output of byproduct muriatic acid by chlorinated hydrocarbon plants.

Acid, Phosphoric—Demand for phosphoric acid was good generally. Production in September was substantially higher than that for August.

Increased output was ascribed to revival of demand for material for mixed fertilizers, both dry and in solution. It was reported that farmers were showing increased demand for liquid complete fertilizers.

The only drawback appeared to be the high amount of inert ingredients in solutions. It was reported that concentrations could only be compounded having a 9-9-9 ratio of nitrogen, phosphorus and potash.

Ease of application, including less labor and time, as well as inexpensive equipment, was a counterbalancing factor to the low concentration of fertilizer materials, it was said.

Acid, Sulfuric—Steel, petroleum, synthetic detergents and pigments were among industrial applications which maintained strong demand. Fertilizer continued seasonally weak.

Steel output last week was estimated at 99.8 percent of capacity, or 2,448,000 tons, by the American Iron and Steel Institute. The previous week, 2,466,000 tons were produced, or 100.2 percent of capacity.

Aluminum Sulfate—Paper industry demand for aluminum sulfate continued strong. Inquiry for water treatment has been adversely affected by dry weather in several areas, since during dry weather there is not as pronounced a need for aluminum sulfate for use as a settling agent in municipal water systems.

An eastern chemical manufacturer recently announced plans to build a $750,000 aluminum sulfate plant in the metropolitan area. Plans call for construction to begin next year.

Calcium Phosphates—Mono and tricalcium phosphates are scheduled to be advanced on spot and contract January 1 by a producer. As yet last week, there was still no uniformity in the trade as to future pricing, however.

Anhydrous and hydrated monocalcium phosphates are slated to be advanced 30c. per hundred pounds January 1, while tricalcium phosphate will go up 50c. per cwt.

Chlorine—Business was still very strong, with supplies tight. Facilities were working at or near 100 percent of capacity trying to keep up on contract shipments.

At present, several sources reported they could take on no new business. One producer noted that contrary to the mild slump which overtook the alkali industry immediately after the October 1 price increases, chlorine sales actually showed an increase in the early days of October.

Key factors in the strong demand were pesticides, chlorinated solvents, and the paper industry.

Lead Acetate—A producer announced that its prices for lead acetate would be advanced 2c. per pound, effective December 1 on spot and January 1 on contract.

New prices are:—White, crystals, 25½c. per pound, barrels, f.o.b. works; granular, 26½c. per pound, same basis; powdered, 26½c. per pound, same basis, and NF crystals, granular and powdered, 34½c. per pound, same basis.

Lead Nitrate—A producer has scheduled a 3c. per pound increase, to go into effect December 1 on spot and January 1 on contract. The increase will put chloride up to 26¾c. per pound, barrels, works.

Soda Ash—Supplies were ample to meet current needs. Buying interest moved along at a good rate last week, following a slack period which had prevailed for a time following the October 1 price increase.

Dense ash moved in good volume to the flat glass industry, as orders for use in automobiles picked up sharply. Light ash demand from aluminum and phosphate manufacturers was strong. Paper industry inquiry also remained heavy.

The export market was thrown out of kilter by the dock strike last week. However, it was not anticipated that there would be an inordinate buildup of stocks on account of the shipping tieup.

Soda, Caustic—Exports of dry forms of caustic were held up last week owing to the dock strike along the Atlantic and Gulf coasts. Currently, there was not too much worry about where production was going to be put, because it was felt that during the crisis, makers of dry grades could stockpile material out of doors.

Meanwhile, current demand for chlorine was so strong that facilities were being pushed to the utmost to fill orders. This high level of production was responsible for a plentiful supply of liquid caustic.

Fortunately, rayon, paper and pulp and other demands were active, and large volume deliveries to these end uses kept supplies of caustic from getting overly long.

Bureau of Mines reports that use of mercury in the preparation of electrolytic caustic soda increased to 807 tons in the second quarter from 789 tons in the first quarter.

Sulfur—Output of sulfur in Mexico dur-

Price Trends

Advanced

Potassium stannate, 0.8c. per lb.
Sodium stannate, 0.9c. per lb.
Stannic chloride, 0.9c. per lb.
Oxide, 4c. per lb.
Stannous chloride, anhyd., 1.2c. per lb.
hydrous, cryst., 1c. per lb.
Sulfate, 1.2c. per lb.
Tin, 2¼c. per lb.

Reduced

None.

Comparative Price Indexes

(100 = 1949 average)

Last week	Prev. week	Last month	Nov. 25, 1955
102.34	102.34	102.32	100.45

For Current Prices see Page 9

Heavy Chemicals

ing the first nine months of 1956 totaled about 430,000 tons, nearly as much again as during the same period of last year, according to the British Sulphur Corporation bulletin.

At the same time, export shipments, key to the financial success of the operations, were 328,000 tons, compared with 118,000 tons in the same period of 1955.

Following are figures estimating the principal non-acid uses of sulfur and pyrites (sulfur equivalent) in the United States in 1953 and 1954, in long tons.

Use	1954*	1953
Wood pulp‡	400,000	390,000
Carbon disulfide	200,000	220,000
Other chemicals, dyes	90,000	95,000
Insecticides, fungicides	100,000	100,000
Rubber	75,000	80,000
Other	135,000	135,000
Total	1,000,000	1,020,000

*Preliminary.

‡Includes an estimated 10,000 tons of S equivalent in pyrites used in making sulfite liquor.

Tin Salts—With higher tin, potassium stannate was quoted at 75.2c. to 81.8c. per pound; sodium stannate, 62.9c. to 68.3c.; stannic chloride, 84.6c. to 85.6c.; stannic oxide, $1.15½ to $1.16½; anhydrous stannous chloride, 98.8c. to $1.483; hydrous crystals, 86c. to 87c., and sulfate, $1.04 to $1.06.

Nonferrous Metals

Aluminum—October output rose to 298,254,483 pounds from 264,631,718 pounds in September, according to the Aluminum Association.

Copper—Market was fairly quiet last week. Primary producers' electrolytic continued firm at 36c. per pound, delivered US destinations.

Mercury—Market continued quiet, with stocks closely held. Metal was priced at $253 to $255 per 76-pound flask, spot.

Platinum—Trading in platinum futures will start December 3 on the New York Mercantile Exchange, the exchange has announced. Advocates of this move base the platinum trading possibilities on the fact that new industrial uses for the metal are being found apart from its traditional role in jewelry.

Tin—Metal fluctuated narrowly, and was quoted at $1.12¼ per pound, spot, on Friday.

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For helpful information on buying and handling these chemicals, send for:

Caustic Soda Buyer's Guide, Bulletin 101

Caustic Soda Engineering and Handling Guide, Bulletin 102

NIALK Caustic Potash and Carbonate of Potash, Bulletin 44

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Election, Mideast

--Continued from page 5

and 34 percent thought them to be too high.

The war scare, apparently, has had little effect pricewise. The leveling trend that started in October is continuing. This month, 57 percent of our reporting members say prices are higher, as compared to 67 percent in October and 84 percent in September. There is a strong feeling on the part of many that, in some instances, recent price increases cannot be justified on the basis of cost, but rather are the result of a policy of "getting all you can while the getting is good."

Inventories

Inventories of unworked materials eased downward during the past month. While a majority still report their inventories unchanged, there are about 10 percent who show a decline over last month. Users of special steel items, nickel and monel are finding it hard to keep stocks at balanced levels.

Employment

Some of the slight drop in employment mentioned last month was recovered this month, though not strongly. Two percent report employment better this month, with no change in the number reporting it to be the same. Employment in some of the building trades, particularly home construction is off slightly due to tighter credit restrictions. The logging and lumber business also reports some decline, whereas heavy industry indicates maximum employment.

Buying Policy

Purchasing executives continue to be cautious in making forward commitments, as evidenced by the reported reduction on lead time in buying both production and MRO items.

On production items, there is a noticeable shift to the thirty-day range by some of those who had previously been operating in the sixty-day area.

Similarly, on MRO items, almost two-thirds are now buying in the hand-to-mouth and thirty day-range.

There is little change in the reported buying policy on capital goods items.

Specific Commodity Changes

With the introduction of the new models, the automobile manufacturers also introduced some new prices—up over the 1956 prices.

On the up side are: Automobiles, abrasives, steel, steel scrap, tin, vegetable oils, fuel oils, paper, coal, rubber, burlap, electric motors and cement.

On the down side are: Brass, copper and wastepaper.

In short supply are: Nickel, steel (plates, structurals, pipe, tubing, shapes), monel, kraft paper, cellophane, and aluminum.

Patent, Research

—Continued from page 4

velopment activity in the largest companies. Although firms with 5,000 or more employees account for only 40 percent of total employment in manufacturing industries, they employ 61 percent of the scientists and engineers in such industries. Equally important, they perform 72 percent of all research and development undertaken by manufacturing companies.

The report said that statistical evidence of the distribution of research and development contracts by the military as between small, large and giant contractors is lacking, but the indications point to the bulk of these contracts going to the largest firms. It was believed that this is a natural result of the heavy responsibility placed upon the government contracting officer.

It is the responsibility of the contracting officer to place contracts where there is a reasonable expectancy of their successful fulfillment. The contracting officers generally have no technical or engineering training and rather than take chances on highly technical matters, it was pointed out, they are likely to be cautious and deal only with companies with a record of proved performance.

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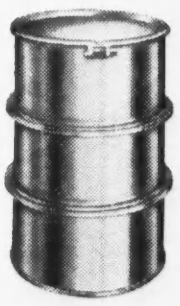

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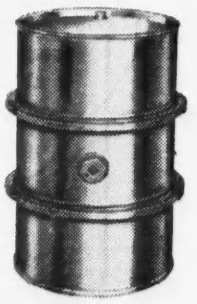

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Isophthalic Acid Seminars Slated by Oronite Chemical

Oronite Chemical Company, San Francisco, this week starts a series of informal two-day seminars on the use of isophthalic acid in the surface coatings and plastics industries.

Three two-day sessions will be held November 27 and 28, November 29 and 30 and December 3 and 4 at the Park-Sheraton hotel. Major emphasis will be placed on the technical aspects of using isophthalic to obtain superior resins and high polymers.

A session is also planned December 6 and 7 in Cleveland, Ohio, and two others are slated December 10 and 11 and December 13 and 14 in Chicago.

Air Pollution Meeting

—*Continued from page 7*

dustry distribution in the Chicago area, community planning, and state and federal activities in air pollution.

The afternoon session will be devoted to discussions of pollution dispersion patterns over urban areas, Chicago meteorological and topographic factors in air pollution, regulatory approaches and problems in area control, and air pollution phases of the zoning ordinance.

Spokesmen for the coal, oil, steel, utility, and manufacturing chemical industries all present the views of their groups on the effect of air pollution control on industry at the December 14 morning session.

Discussions at the afternoon session will center on the special problems affecting the automotive industry, property management, municipal services and research.

Feature of a luncheon on December 13 will be the induction of new officers and directors of MAPPA. An address on "What Industry Has Done and Is Doing to Reduce Air Pollution" will be presented at the luncheon on the following day.

Germany Far Ahead

—*Continued from page 7*

States, 50 million additional acres would be required to maintain present agricultural production without the use of fertilizer.

Among the new ideas presented in the German report is a method of "rolling" fertilizer into the forest soil. Another chapter shows how German foresters establish game browsing areas in the forest by planting food grasses so that deer and other game will feed on the grasses rather than on young trees.

Copies of the report, "The Use of Commercial Fertilizers. Particularly Nitrogen, in Forestry," may be obtained by writing Dr. Crittenden at Nitrogen Division, 40 Rector street, New York 6.

Chemicals Foreign

—*Continued from page 7*

million, about 1 percent below the $1,520.1 million during August, but 21 percent over the September, 1955, figure of $1,255.7 million.

General imports during September also were down in contrast to the increase recorded in chemical imports. The month's all merchandise total was $992 million, a decrease of 5 percent from the August total of $1,049.4 million, but about 5 percent above the September, 1955, value of $946.2 million.

For the first three quarters of the year, all exports are up 21 percent over the corresponding period of last year, while all imports are up 14 percent.

American Lithium Institute

—*Continued from page 7*

polyolefin plastics industry, and of futuristic fuels for aircraft and missles are fields which show tremendous future promise for lithium metal. They support the already expanding uses of lithium salts in porcelain enamels, air conditioning and multi-purpose greases.

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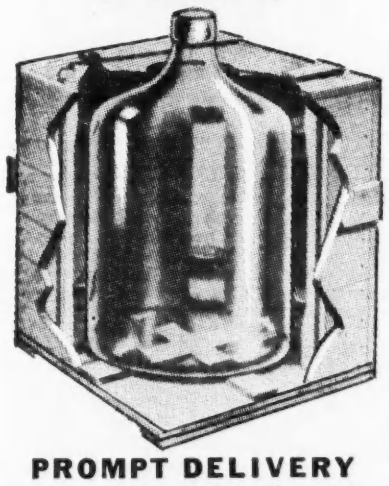

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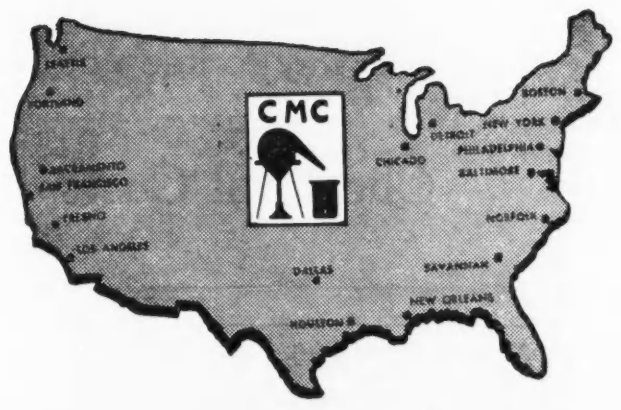

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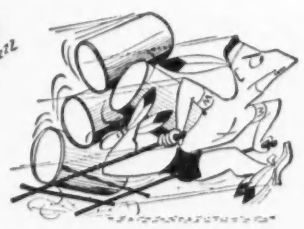

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Agricultural Chemicals

The market continued to show little activity on most fronts last week, producers here reported, though government export contracts are offering relief in some quarters. The most recent, a $1.2 million contract with Vietnam, includes $800,000 of nitrogenous fertilizer, $200,000 of potash fertilizers and $200,000 of potash and other fertilizer materials. Stocks in many areas of the market, and particularly in anhydrous ammonia, are reportedly growing heavy. Some producers were intensifying concentration programs in order to reduce stocks and produce material more easily shipped than the bulkier grades. The pesticides alone appear to show any positive movement in the market. Inquiries for DDT, 2,4-D and others have grown in the export market during the past weeks. Demand in this market is particularly active in South America and Africa, where governmental programs are aiding the movement.

The animal proteins market also showed little movement last week. Demand was dull and production remained at its previous level. Fishmeal and fishscrap dealers reported very little material available. What was around was selling at advanced listing. This material is the last of the domestic scrap and meal. Dealers await the pending development of the foreign material market. Reports from government sources noted that while the import of Canadian material showed growth, the import of other foreign materials reflected declines.

Government information noted that the use of fertilizers of high nutrient content during 1954-55 showed an increase. This, the government report noted, reflected the sixteenth consecutive year of increased usage. Consumption of the primary nutrients increased by 3.8 percent during the past year over consumption of the previous year. The 6,120,000 tons of plant nutrients contained in the 22,724,000 tons of fertilizer sold was an increase of about 224,000 tons over the quantity of nutrients used in 1953-54.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 25, 1955
108.68	108.68	106.30	110.78

For Current Prices see Page 9

Animal and Plant Foods

Anhydrous Ammonia—This market continued to report a plentitude of stocks on hand last week, it was reported here. Though government overseas sales have grown in volume, and a number of recent commitments have been reported, the condition remains one of heavy stock and slim sales. International restrictions coupled with the uncertainty of the world picture today, were broached as two reasons for the present heavy surplus by some producers. However, the weak sales picture of the past seasonal period was also a major factor. Producers noted that though some relief may be found in export sales, the domestic scene will not find real succor without a good seasonal sales period.

Animal Proteins — Prices remained steady in this market last week, dealers here reported, as interest continued at a relatively low level. The fishscrap and fishmeal markets, both of which rose two weeks ago on the tight supply of the final remnants of the domestic material, awaited the development of the foreign material market. Government sources noted that United States buying of material from Canada is growing, while that from most other countries appears to be declining. Other materials, such as blood, tankage and hoofmeal, showed relatively quiet weeks on the market, it was said.

Production of fishmeal and scrap in the United States during September totaled 29,262 tons as compared with the 30,611 tons produced during September of the year previous. This figure includes groundfish herring from Alaska and Maine, sardine from the menhaden fishing area, and tuna and mackerel from the Pacific. Production for the first nine months of the year ending in September totaled 228,970 tons as compared with the 200,511 tons produced during the first nine months of last year. The total 1955 production was computed at 247,600 tons. By far the greatest production came from the menhaden area which offered 24,480 tons for the September, 1956, figure; 27,088 for the September, 1955, figure; 178,610 tons to the tally for the first nine months of this year; 160,625 to the 1955 nine month figure, and 190,617 tons for the total 1955 figure.

Phosphate — United States September production of superphosphate and other phosphatic fertilizers amounted to 170,557 short tons (100% A.P.A.), an increase of nineteen percent from the August 1956 output, the Bureau of the Census has reported. Shipments of superphosphate and other phosphatic fertilizers during the month totaled 126,630 tons or an increase of twenty-nine percent over the previous month's volume. Stocks on hand at the end of September were three percent less than those held on August 31.

Sodium Nitrate—Dealers and producers of synthetic material have noted recently that the price drop of Chilean sodium nitrate (natural) early in the fall has had no real effect on their market. The price decline of the Chilean material, $1.75 per unit ton, was the first downward shift since 1950. 600,000 unit tons of sodium nitrate were brought into the country from Chile. Producers of synthetic material at the time of the price drop did not bring their own listing down to meet the decline because, they said, the price of the synthetic material is still less than that of the natural. In the few areas where the material was selling for more, it was adjusted.

Urea—This material, in spite of the laxness of the market, continued to show a competitive advantage over less concentrated nitrogen sources in shipment to the more remote areas and production figures for urea continued to show up well in producer's reports. The tone of the market was further strengthened by demand in diverse fields, in particular that from plastics manufacturers.

Pesticides

Lindane—Though this material showed great promise originally, as an insecticide, reports from usage areas in the South have proved less than promising, dealers have said. In initial uses, lindane proved highly effective against a number of insects. However, during the past season, reports from areas have shown that many insects have developed immunity to its use. This fact, originally reported by the government, proved a strong factor in the decline of use of the material last season.

Superphosphate & Other Phosphatic Fertilizer Production

Following are data compiled by the Bureau of the Census indicating superphosphates and other phosphatic fertilizer produced and shipped in the United States, January to September, for this year and 1955. Included are percentage changes.

Grade	9 Months 1956 in short tons 100% A.P.A.		9 Months 1955 in short tons 100% A.P.A.		1956 percentage change from 1955	
	Production	Shipments	Production	Shipments	Production	Shipments
Normal	1,107,864	604,924	1,113,483	598,723	— 1	+ 1
Enriched	10,059	4,056	32,857	10,563	—69	—62
Concentrated ..	565,646	537,557	496,726	490,217	+14	+10
Wet-base goods.	4,344	5,010	5,262	6,032	—17	—17

Aliphatic Organics

All other major producers joined last week in the ½ cent per pound price reduction first announced in the week previous on tanklot purchases of sodium lauryl sulfate. The reduction was put into effect immediately at all points. Like the leader in this move, the other producers reduced prices on drumlots by 2 cents per pound, thus in effect shaving the drum differential by 1½ cents per pound, in the case of carlots from 2½ cents to 1 cent per pound. This market was not notably strong, producers reported. Material was moving in tanklots only rarely.

The industry at large was discussing the announcement of the week previous that one leading producer had advanced methanol prices 2½ cents per pound across the board effective January 1 on both contract and spot. There seemed to be little doubt that the major producers would move uniformly in agreement with this advance. Methanol demand was sustained by powerful and growing consumer industries, in particular by manufacture of formaldehyde, which requires methanol both as a raw material and for use as an inhibitor. In addition, several and diverse new markets were under development.

Market behavior of the ethanolamines reflected the mushroom growth of sales of synthetic liquid detergents, up 99.3 percent in the first half of 1956 as compared to the like period in the year previous and now claiming 69 percent of the total soap plus detergent market. Amides of ethanolamine were in strong demand for development of organic builders credited with imparting to the syndets high-sudsing and grease-cutting properties.

Butadiene, in heavy demand for making synthetic rubber, which in turn was moving in good volume into automotive manufacture, was still tight. New production capacity was being rushed into commercial operation, but producers said it would be several months before balance with demand could be attained.

Blackstrap molasses rose another 2c. per gallon in New York. Here supply was still adequate. Demand was moderate.

Consumer resistance to high prices exerted a depressing influence on the market in general, but colder weather improved demand for feed molasses in the middle west. There was no longer a shortage of tankcars.

Some sales were reported at 1c. per gallon higher than the previous top at New Orleans, where several distributors had withdrawn from the market, but minimum prices were at the level previously reported. Demand there was slow to moderate, supply adequate.

Price Trends

Advanced

Molasses, New York, 2c. per lb.

Reduced

None.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Nov. 25, 1955
130.46	130.43	130.46	130.73

For Current Prices see Page 9

Acetic Acid—Production rose appreciably in August, it was indicated by the most recent figures made available by the Tariff Commission.

Synthetic output during August amounted to 45,837,947 pounds, the commission reported, while that in the month previous had been only 42,420,313 pounds. Production of natural acid was put at 2,084,000 pounds during August, as compared to 2,060,000 pounds produced in the month previous.

Acetone—Trade continued last week in heavy volume, buoyed by demand for its use in manufacture of methyl methacrylate. Paint removal and other solvent uses were also providing firm support.

In general, consumers were getting adequate supply, but there were occasional delays in shipments in some areas.

Production amounted to 49,633,162 pounds in August, the latest month for which Tariff Commission statistics were available. That figure was off by a trifling amount from that for the month previous, which was 50,456,924 pounds.

Butadiene—As automotive manufacturers raised their sights on production quotas, the squeeze on butadiene supply was tightened. Indeed, availability of this material was cited as the limiting factor on manufacture of synthetic rubber moving into the automotive industry.

Not only was an increased number of automotive units in prospect, but rubber consumption per unit was reported to be greater than it had been in previous years. For one thing, the new 14-inch tires, now standard equipment on several of the more popular passenger models, require more rubber than the old type tires. And non-tire automotive requirements for rubber were greater, including, for example, foam rubber for upholstery, insulation material, hose connections in the cooling system and weather stripping for doors and windows.

Substantial additional production capacity for butadiene was being rushed into commercial operation, but producers said it would be several months before balance with the heavy current demand could be attained.

Carbon Disulfide—Production in August, most recent month for which Tariff Commission data were published, was 44,551,510 pounds, representing a substantial increase over output in the month previous, amounting to 37,417,696 pounds.

Ethanol—The market was very firm in tone last week. Demand was good. Supply, generally adequate, was nowhere particularly long.

The outlook, trade sources said, was for supplies holding only a short lead ahead of consumption.

Prices were described as uncommonly strong and buoyantly inclined.

Methanol — Additional producers, discussing a major factor's announcement of an across the board 2½c. per gallon price increase to go into effect January 1, were expected to move in harmony with the advance before the effective date.

Current demand was strong, and there were good prospects for incremental business from new uses. One of these, a 28 percent aqueous solution added to jet aircraft fuel (anti-detonation injection, or ADI) was of considerable interest to Air Force people. The application markedly increases jet exhaust gas velocity at take-off, eliminating the necessity for rocket assist take-off units.

Consumption as a raw material used in manufacture of formaldehyde remained a strong market factor and was still growing at a steady rate.

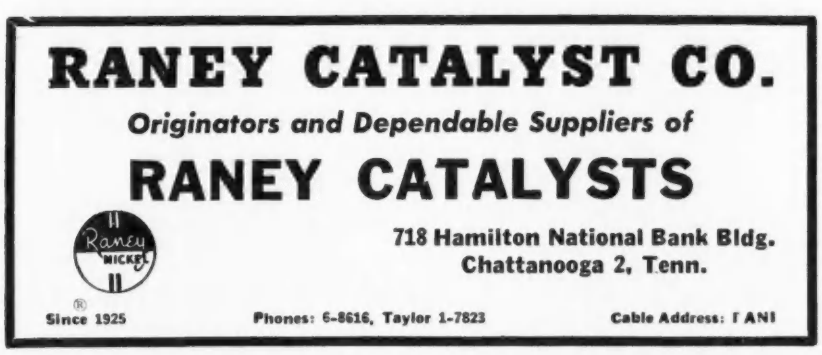
Trend of trade volume thus represented a composite of two rising demand curves, one a seasonal influence attributable to sales of antifreeze fluid and typical fourth quarter automotive and general industrial activity, the other a long-term growth factor based on diversification and market development.

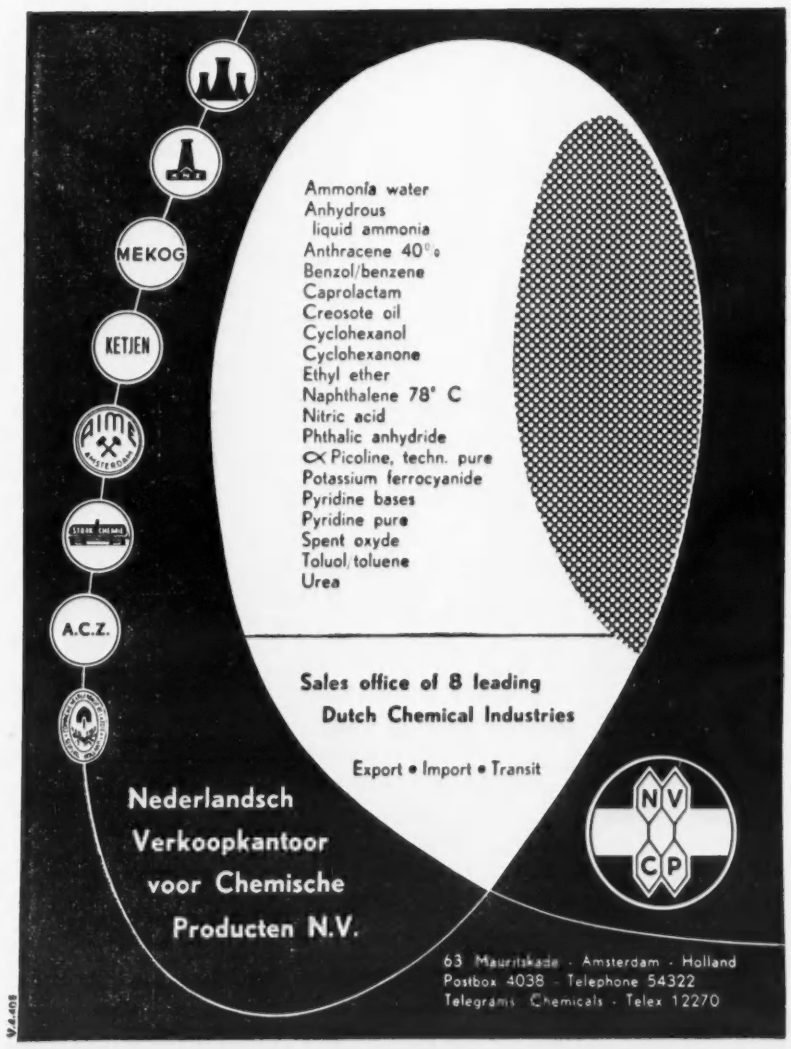
Producers in general were well pleased with the way this material was moving. Some measure of their optimism was afforded by announcement that one producer was studying plans with a view to boosting annual output by 30 million gallons.

Ethylene glycol had by now preempted a lion's share of the trade in antifreeze liquids, but methanol volume was more than compensated by increased sales for use in automotive and aviation fuels, as an intermediate in manufacture of plasticizers and pharmaceuticals and as a solvent in demand in the leather and petroleum industries and in manufacture of photographic chemicals, finishes and explosives.

The most recent production figures made available by the Tariff Commission indicated that output amounted to 130,942,614 pounds of synthetic and 1,301,440 pounds of natural methanol during the month of August. Corresponding figures for the month previous were 126,518,372 pounds of synthetic and 1,328,000 pounds of natural methanol. Cumulative production of synthetic material through the first eight calendar months of 1956 added up to 1,008,247,552 pounds, while that for the entire year 1955 was 1,331,991,608 pounds. Natural methanol production ran to a total through the first eight calendar months of this year of 10,265,440 pounds.

Increased January 1 prices will be, delivered basis in Zone 1, 32½c. per gallon for tankcars, 35½c. per gallon for tankwagons, 48½c. per gallon for drums in car-





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Molasses—Blackstrap soared an additional 2c. per gallon higher at New York in the week ended last Monday, up from 25c. to 27c. per gallon. Demand continued moderate. Supply was adequate.

In New Orleans, where several distributors had withdrawn temporarily from the market, quotations inched up to a high of 27c. per gallon in some instances, but the range was reported as running from 25c. to 27c. per gallon, with most sales at 26c. per gallon. The range in the week previous had been 25c. to 26c. per gallon. Demand was again slow to moderate. Supply remained adequate.

Consumer resistance to high prices was again a potent market factor in general, strong enough to offset in part the improved demand in the middle west attributed to colder weather.

Most recent weekly average price available through the Louisiana Sugar Exchange for Louisiana blackstrap was 24¾c. per gallon, with a high of 25c. per gallon.

Department of Agriculture noted that tankcars were no longer in short supply.

Sodium lauryl sulfate—A ½c per pound price reduction on purchases in tanklots, first put into effect by a major producer November 15, spread throughout the industry last week.

Like the company that introduced the latest price adjustment, the others reduced drum prices by 2c. per pound, thereby effecting a reduction from the former 2½c. per pound differential on carlots to a current differential of only 1c. per pound.

A typical schedule last week quoted 18c. per pound on tanklots, 19c. per pound on drums in carlots, 19½c. per pound for 6,000 pounds or more, 20c. per pound for 2,000 pounds or more, 20¾c. per pound for 500 pounds or more and 21½c. per pound on single drum purchases.

The market was not particularly strong. Material was moving in tanklots only spasmodically.

Pennsylvania Salt

—Continued from page 3

complished through an exchange of stock.

With a new main plant and office located in Los Angeles and another recently constructed plant at Dallas, Tex., Delco's major activities are the manufacture and sale of organic and inorganic specialty cleaning and paint stripping compounds for the aircraft industry and for general maintenance purposes.

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"Delco's products will complement Pennsalt's specialty lines in both new and related fields and will also provide attractive opportunities for the upgrading of some of our basic heavy chemicals. The availability of two modern plants, bringing the company's total in the United States to sixteen, fulfills, a year ahead of schedule, plans for production facilities in California and Texas."

Reciprocally, services provided by Pennsalt's plants, warehouses and sales offices throughout the northwest, central and eastern areas will facilitate the distribution of Delco's products and ensure efficient customer service for these products on a national scale.

Following transfer of ownership and control, Delco's operations will continue under the immediate direction of its president, Lyle Harbour, and its vice-president and general manager, A. F. Slover, and their associates. Delco's activities will become an integral part of the chemical specialties division of Pennsalt under General Manager Albert H. Clem.

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Petroleum Derivatives

The decision of the United States government to help meet Europe's emergency oil needs was the most important development in this market last week. The State department announced that American companies would supply oil through arrangements with the Organization for European Coorperation. In response to this announcement production was increased and prices showed a firm tone. The extent to which the crisis is effecting European oil supplies is revealed in a report that for the week ended November 10, stocks of foreign crude decreased 1,227,000 barrels, while domestic stocks had increased by 220,000 barrels.

A firmer outlook in solvents and diluents is expected by some observers to follow from the austerity imposed on Europe by the current oil crisis. There will be a tendency to stockpile available materials, and this could mean an increase in American exports of toluol. Meanwhile, the domestic solvent market continues to evince good buying interest. Cokeoven producers of toluol report that inventories are still in much better shape than before the steel strike. In turn, this results in better industrial markets for petroleum toluol, although a great percentage of this production is moving into high octane gasoline, where demand is rapidly expanding.

The market for xylol is a particularly firm one because of the tight inventories experienced in coaltar quarters. With much of the cokeoven output bought in advance of production, petroleum producers have been able to expand sales in the "immediate requirement" category. Benzol has continued to move exceptionally well, reflecting the sharp seasonal pickup in automobile manufacture.

Along with solvents and diluents, liquefied gases are the most active materials in the market. In addition to the seasonal sales increase, brought on by the cold weather, producers note continual expansion in the scope of the market. As reported previously, the consensus among producers is that supplies will be adequate during the coming weather. A shortage of tankcars has been noted, but producers feel the problem can be handled by increasing the runs of individual tankcars.

Solvents and Diluents

Benzol—Seasonally high production in the automobile industry is promoting much of the strength noted in this market. A belief has been expressed in some quarters that imports to this country might fall off as a result of the Middle East oil crisis. These sources feel that European producers and consumers may commence stockpiling the material, in the face of a general petroleum shortage. American supplies are in the same position reported previously—close balance for cokeoven producers, ample in the petroleum industry.

Mineral Spirits—Sellers had supplies ample to meet good buying interest. All prices were steady at long established levels.

Partial Aromatics—Buying interest was moderate to good, generally in line with seasonal expectations. Quotations were steady and unchanged.

Toluol—Cokeoven supplies were still more ample than what is considered ideal, but producers find their position much improved since the steel strike. Petroleum material is in good balance, because of record high demand for high octane gasoline.

Xylol—Seasonally high demand is further augmented by the tightness in cokeoven xylol. With petroleum supplies amply available, the market as a whole has shown good balance.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended November 10 totaled 281,903,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 282,831,000 barrels for the preceding week, this represents a decrease of 928,000 barrels, comprising an increase of 299,000 barrels in stocks of domestic crude and a decrease of 1,227,000 barrels in stocks of foreign crude.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 25, 1955
105.71	105.71	105.71	104.32

For Current Prices see Page 9

LPG'S

Butane—Cold weather along the East Coast and in the Midwest has stimulated sharply increased demand for this material in recent weeks. Producers have winter stocks at maximum levels in anticipation of the seasonal surge in demand. These stocks should be adequate, it is believed, barring an unusually cold winter. The tankcar shortage, previously reported here, will be met by increasing the runs of individual tankcars.

Propane—As in the case of butane, the only supply problem anticipated in this market is in connection with transportation. The tankcar shortage could possibly affect some areas, although producers and the railroad people have arranged to run individual tankcars as often as possible. As well as the regular seasonal expansion, this market continues to show the long range growth noted all year long.

Waxes

Microcrystalline—Sales have been running ahead of last year's totals, reflecting expansion in foreign trade and in many domestic lines, notably food packaging. Prices are steady at levels established October 1. Supplies are ample.

Paraffin—Supplies in major areas of the country are reported to be in good balance. October 1 price advances have been firmly maintained. The sales pace has shown steady improvement since the summer lull except for a brief period following the October 1 price change, during which consumers allowed their inventories to drop to regular levels. Before the price advance, buying had been particularly heavy.

Miscellaneous

Crude Oil—Current reports of the industry for the week ended November 9 indicate an increase in crude oil production and an increase in crude runs. According to the A.P.I., the daily average output of crude (including lease condensate) was 7,050,000 barrels, an increase of 69,000 barrels from the preceding week. Daily average crude runs to stills of 7,964,000 barrels were 111,000 barrels above the preceding week, and 411,000 barrels above the week ended November 11, 1955. Runs of foreign crude amounted to 1,060,000 barrels daily, compared with 1,018,000 barrels in the preceding week. For the four-week period ending November 9, crude oil production averaged 7,007,000 barrels daily and crude runs to stills averaged 7,754,000 barrels daily, with runs of foreign crude averaging 1,051,000 barrels daily.

Crude oil production in Saudi Arabia during October totaled 32,701,704 barrels, or an average of 1,054,894 barrels per calendar day, as compared with 31,075,696 barrels, or an average of 1,002,442 barrels per calendar day, during the same month last year.

Total production of crude oil in Arabia during the first ten months of 1956 was 317,930,475 barrels, an average of 1,042,395 barrels per calendar day. This compares with a total of 289,132,291 barrels, an average of 951,093 barrels per calendar day, during the same period last year. Crude run in the refinery during the first ten months of 1956 amounted to 62,290,037 barrels, an average of 204,230 barrels per calendar day, as compared with 59,536,874 barrels, an average of 195,845 barrels per calendar day, during the same period last year.

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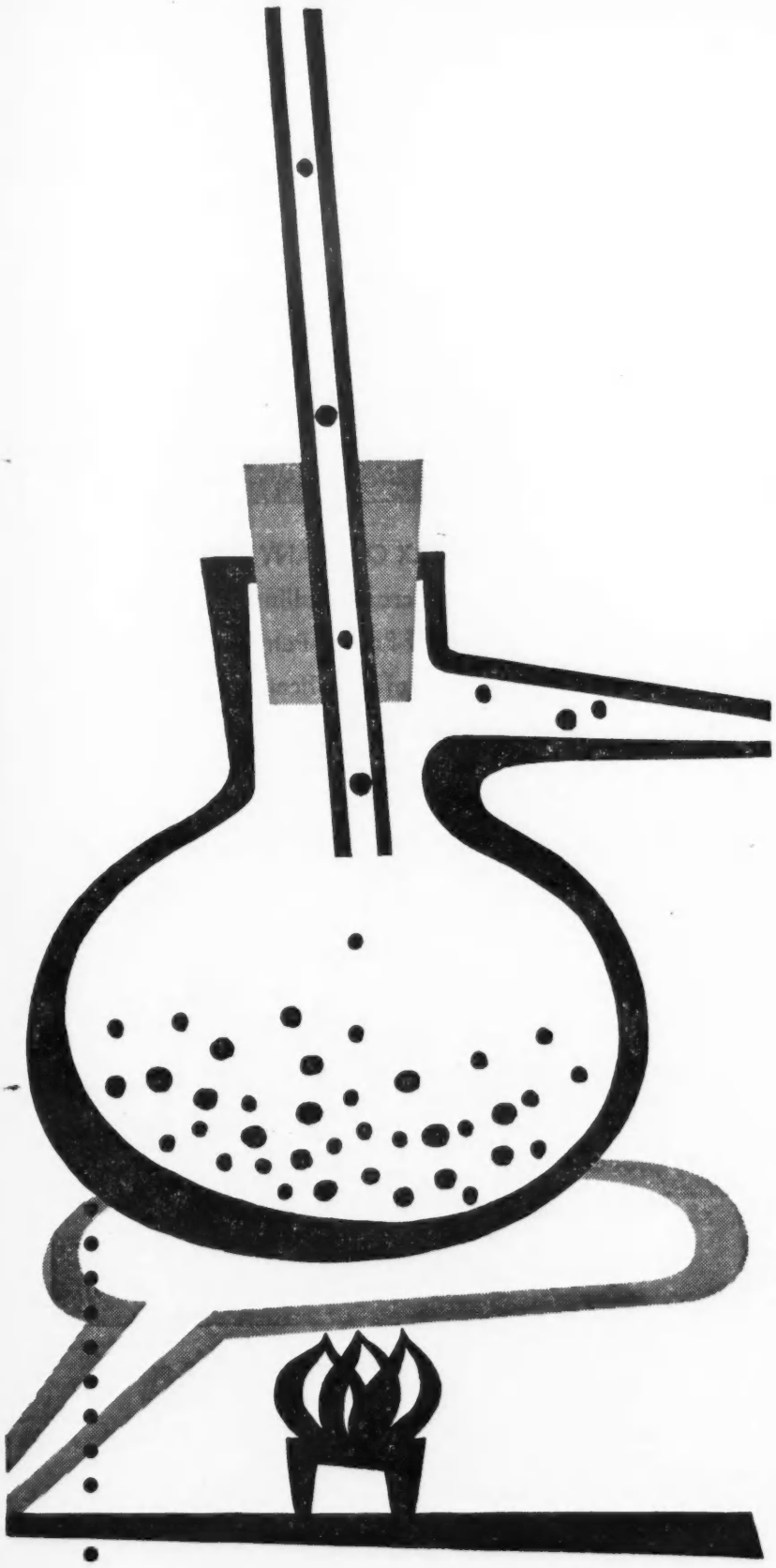

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Coal Chemicals

Maleic anhydride was advanced 1½ cents per pound across the board by a major producer late last week. Effective dates were immediately on spot business and January 1 on contract. Quotations had not been changed in years. The company said the current price adjustment was necessitated to compensate in part cumulative increased costs of raw materials, labor, freight and packaging units. The material was moving into intermediate use in manufacture of maleic modified rosin ester varnish resins and polyester resins and as a partial replacement for phthalic anhydride in manufacture of alkyd resins.

Trade in phthalic anhydride was quiet last week, since consumers still had not had time to work off surplus stocks acquired in the spate of buying that preceded the October 15 effective date of higher prices. Producers expected them to try to live on the balance of these stocks through December 31, in order to be able to show a trim inventory position in annual reports. Immediately after that, trade sources believed, intense buying interest would reappear. Fundamental economic factors governing this market, chiefly production quotas in the automotive and hardgoods industries, were regarded as sound.

The inventory position with respect to toluol was only slightly heavy, a fact that induced producers to describe themselves as contented.

Xylol, coming onto the market in heavy volume, remained in urgent demand.

The American Iron and Steel Institute estimated that production of steel in the week ended November 25 would amount to 99.8 percent of theoretical capacity, equivalent to 2,458,000 tons of steel. That figure compared to output of 2,466,000 tons in the week previous, 2,491,000 tons in the comparable week in October and 2,416,000 tons in the corresponding week one year ago.

PriceTrends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 25, 1955
115.56	115.56	115.56	114.66

For Current Prices see Page 9

Basic Products

Benzol—Demand for this material remained very strong last week. Production was coming on in heavy volume, just adequate to satisfy customers' needs. Shipments were moving out on schedule in most areas, and the market was in equilibrium. Prices were firm and unchanged.

Producers noted that imports of cheap Russian benzol had tapered off somewhat during the last two or three months. They were still heavy in August (see table below). It was reported that the September figure would indicate a substantial decline.

Value of August imports was put at $994,397, which works out to slightly more than 32½c. per gallon.

Cresols—Further adjustments were reported last week to the end of achieving uniform specifications throughout the industry for o-cresol. All major producers' grades will now fall into some or all of the categories defined by melting point ranges from 25° to 28.9° C, from 29° to 29.9° C, from 30° to 30.49° C and for 30.5° C or more.

Prices across the board were now uniform within these four categories.

Toluol—Fairly heavy inventories had reappeared since the summer steel strike, but the picture remained very much brighter than it was early this year. The economics of this trade being what they are, producers described themselves as well contented with the balance of the current market.

Domestic sales volume was heavy, and only the enormous volume of current production was giving producers concern. Excess output was going into the gasoline stream or being sold abroad.

Xylol—This market remained strong enough last week to continue to absorb all of the heavy cokeoven output easily and to provide excess demand for susbtantial trade with petroleum producers.

Total production through the first eight calendar months, according to data published by the Tariff Commission, represented a rate of substantially more 10 million gallons per month.

Intermediates

Divinylbenzene—Market diversification and deeper penetration of established marketing areas were manifest in continued growth in this trade. Volume in 1956 to date was said to be well ahead of the mark reached by this time in the previous calendar year. Prices were firm and unchanged.

Greater demand for use in ion exchange was linked to discovery of additional ad-

Aromatics Foreign Trade: August

Following are statistics compiled by the Bureau of Census summarizing the movement of certain aromatic chemicals in foreign commerce. Units employed by the Census Bureau have been retained in all cases. Attention is called to the fact that exports of toluol are reported in pounds and that cresols and cresylic acid ADF imports are given in gallons, while dutiable cresols and cresylic acid imports are reported in pounds.

	August 1956	*July* 1956	*First Eight Months* 1956
EXPORTS			
Aniline oil and salts.....lbs.	.....	23,250	**
Benzol .....gals.	51,700	106,211	2,385,916
Coaltar, crude and refined.....gals.	65,615	54,169	**
Creosote or dead oil.....gals.	101,370	101,227	**
Cresols and cresylic acids.....lbs.	322,631	171,886	**
Other coaltar acids.....lbs.	22,889	140,236	**
Dimethylaniline .....lbs.	.....	.....	**
Diphenylamine .....lbs.	228,525	228,525	**
Dyes, stains, color lakes and toners of coaltar origin:			
Color lakes and toners.....lbs.	217,595	246,419	**
Indigo, synthetic (all forms).....lbs.	500	900	**
Sulfur black .....lbs.	.....	19,050	**
Other coaltar dyes and stains.....lbs.	706,228	701,610	**
Naphthalene, crude and refined .....lbs.	.....	.....	**
b-Naphthol and b-naphthol flakes .....lbs.	.....	4,806	**
Phenol .....lbs.	6,537,097	3,602,743	28,949,694
Photographic chemicals of coaltar origin.....lbs.	48,085	55,621	**
Phthalic anhydride.....lbs.	988,220	1,642,240	4,389,040
Pitch, from coaltar.....long tons	3,416	4,559	29,822
Rubber compounding agents of coaltar origin:			
Accelerators .....lbs.	351,888	312,840	**
Antioxidants .....lbs.	504,087	996,197	**
Other .....lbs.	222,241	165,035	**
Toluol .....lbs.	4,847,151	9,575,533	40,963,518
**Not separately reported in first six months of 1956.			
IMPORTS			
Benzol .....gals.	6,185,918	9,260,771	46,261,076
Creosote and dead oil.....gals.	3,991,318	3,400,219	23,223,584
Cresols and cresylic acid, ADF.....gals.	426,926	258,508	2,285,798
Dutiable .....lbs.	.....	55,524	761,486
Naphthalene, distilled at less than 79° C.....lbs.	6,470,785	7,613,015	55,472,256
Distilling at 79° C and over.....lbs.	90,278	34,169	457,650
Xylol .....lbs.	.....	772	46,710

Coal Chemicals

vantages to removal of trace ions of iron, sodium, calcium, aluminum and other elements in purification of uranium ores and water used for various chemical purposes. Another increasing use for divinylbenzene was as a cross-linking agent in manufacture of certain kinds of synthetic rubbers.

Maleic Anhydride—A major producer announced late last week a 1½c. per pound price increase across the board effective immediately on spot business and January 1 on contract. New quotations were 27½c. per pound on tanklots, 28½c. per pound on carlots and 29½c. per pound on less carlots.

This material was currently moving into intermediate use in manufacture of maleic modified rosin ester varnish resins and polyester resins and, partially replacing phthalic anhydride, in manufacture of alkyd resins.

The announcement attributed the price advance to increased costs of labor, raw materials, freight and shipping containers.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending Nov. 25 was as follows:—

Ammonia liquor	lbs.	956,040
Ammonium sulfate	lbs.	40,708,795
Benzol	gals.	3,639,120
Coaltar	gals.	17,887,198
Creosote	gals.	693,900
Naphthalene, crude	lbs.	3,870,420
Pyridine, refined	lbs.	13,878
Toluol	gals.	801,840
Xylol	gals.	231,300

Antiozonants Available From Eastman Chemical

Two antiozonants designed to retard deterioration and cracking of rubber products produced from GR-S (butadiene-styrene and other elastomers) are being made available in commercial quantities by Eastman Chemical Products, Inc., New York, a subsidiary of Eastman Kodak Company.

The two ingredients are being marketed under the designations of "Tenamene 30" (N,N' -di-2-octyl-p-phenylenediamine), and "Tenamene 31" (N,N' -di-3 (5-methyl heptyl)-p-phenylenediamine).

Penicillin Drug Rulings Get Minor FDA Changes

Several minor amendments to regulations of the Food and Drug Administration covering the certification of penicillin-containing drugs were published in the *Federal Register* November 20.

The amendments related to standards of identity for penicillin tablets, and to the exemption of buffered penicillin powder from certification when sold for veterinary use.

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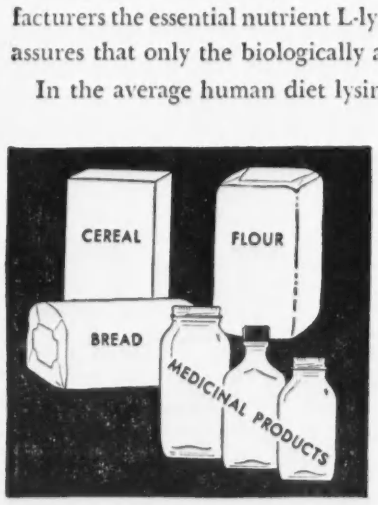

Volume production of Pfizer L-lysine means you can offer an important new health plus in your products. In medicinal products Pfizer L-lysine should have special significance in meeting the nutritional needs of children, pregnant women, older people and those who are recovering from illness. In cereal food products, particularly wheat products,* Pfizer L-lysine can improve the amino acid balance to a level comparable to that of high quality animal proteins.

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Drugs, Fine Chemicals

A major producer announced fine chemicals price increases to be effective December 1 on spot and January 1 on contract. Sodium chloride, USP, is to be advanced 3 cents per pound while lead acetate, NF crystals, will be increased 2 cents. Ammonium sulfate, purified, will be up 1 cent per pound and ammonium acetate, purified, is to be increased 3 cents per pound.

Prices on pharmaceuticals were firm and production continued at a record breaking pace. Trade sources were generally optimistic about prospects for 1957 and some manufacturers noted an increased number of orders being placed for advanced requirements. A serious supply situation had developed around such water soluble gums as tragacanth and locust bean. Prices on tragacanth ribbons have advanced sharply over the past month and supplies are very tight. Dealers said that crop harvests were poor this year and lately the situation has been further aggravated by the trouble in Egypt. It was anyone's guess as to when shipments from Iran and South Africa would be forthcoming via the Suez Canal. Further price advances were expected in the near future.

Census bureau reports showed that production of sulfonamides was up almost 50 percent for the first seven months of this year over a comparable period for last year. On the other hand, exports showed a 17 percent decline over the period with the largest drop in shipments of sulfadiazine to the United Kingdom, Netherlands and Japan. During the first seven months of 1955, the United States shipped 63,700 pounds of sulfadiazine to the United Kingdom, 20,314 pounds to the Netherlands and 17,729 pounds to Japan. No shipments were made to these countries during the first seven months of this year. Increased production of sulfonamides in this country in 1956 was attributed by producers to the current trend in combined antibiotics therapy and triple sulfa preparations.

The market for penicillin salts was very good with prices holding firm after advances made during October. There was no indication of a price change in the near future. However, producers reported business as very good with buyers placing orders for bulk material at an increasing rate.

N-Acetyl p-Aminophenol—Sales of this item as an analgesic were reported very good. It was said that side effects were minimal in its use and no toxic products are present to irritate the user. It has been shown that n-acetyl-p-aminophenol is formed in the body by either acetanilid or acetophenetidin as an initial step in the metabolism of these drugs and is the form in which these drugs exert their analgesic effect.

Supplies were good and lots of 1000 pounds or more were listed at $1.75. A twenty-five pound drum was priced at $1.85.

Acid, p-Aminobenzoic—Demand was good and USP material, 1000 pounds or more, was priced firmly at $2.60 per pound. It was reiterated that buyer interest was especially good for this item to be used in combination with cortisone, salicylates or antibiotics in the treatment of rheumatoid arthritis. It was said that clinical investigators reported a synergistic effect through the use of PAB in this manner.

The acid is widely distributed in plant and animal tissues and relatively high concentrations are found in yeast, liver and rice polishings. It is commonly associated with the B-complex group of vitamins.

Ammonium Acetate—As of December 1 on spot and January 1 on contract, purified material in fiber drums will be increased 3c. per pound. The new price will be 41c. it was announced by a major producer. Supplies were adequate and moving in good business volume.

Ammonium Sulfate—Purified material, a major producer announced, will be advanced 1c. per pound effective December 1 on spot and January 1 on contract. The new price on carlot quantities in 100 pound paper bags will be 8½c. per pound while truckloads will be priced at 9c. Less than carload quantities, under the new price schedule, will range from 10c. to 10½c. in amounts of one to five pounds.

Fishliver Oil—Demand was reported routine and stocks plentiful. There were no price changes indicated by dealers.

PriceTrends

Advanced
None.

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 25, 1955
65.24	65.23	65.64	66.42

For Current Prices see Page 9

Exports of fish oils and fishliver oils for the period from October 15 to November 16 totaled 2,561,457 pounds while for the statistical month of September exports amounted to 17,175,364 pounds. Exports for the period November 12 to November 16 were 808,800 pounds.

Hydrocortisone—Both alcohol and acetate were reported in good demand. Producers said that increased amounts of a more potent form of hydrocortisone alcohol was being used in the treatment of rheumatoid arthritis. Prices were firmly quoted on bulk lots of alcohol and acetate at $4.50 per gram.

Hydroquinone—Photo grade was in good demand and prices were slightly higher than those listed earlier this year. Prices currently ranged from $1.03 to $1.06 per pound in drum quantities. Supplies were good and orders were being promptly filled it was said.

Lead Acetate—NF crystals were to be advanced 2c. per pound effective December 1 on spot and January 1 on contract it was announced last week by a major producer. The new price will be 34½c. per pound. Supplies were plentiful and sales were steady at a moderate volume for this item used as a chemical reagent.

Lysine—A major producer of pharmaceuticals and fine chemicals is offering commercial quantities of l-lysine in fifty and twenty-five pound drum quantities at $12 per pound. Lots of five pounds were quoted at $13 while one pound bottle was to be sold for $14. dl-Lysine, monohydrochloride, was quoted at $12 in 100 pound lots.

It was pointed out that since the nutritional value of a protein is limited by the deficiency of one of the essential amino acids, enrichment with a fermentation-produced acid such as l-lysine will increase the protein's value by several times the cost of the added material.

Lysine was said to be of particular importance in the enrichment of cereals and is finding good use in geriatric and pediatric preparations.

Interest was good for the fall season and supplies were quite adequate to handle the current requirements.

dl-Methionine—Methionine, one of the eight amino acids essential for maintaining life in the human body, in fifty pound fiber drums was reported at $3.50 per pound. Supplies were good and moving in brisk business volume to makers of cereals to be used for cereal enrichment. Although methionine is synthesized to some extent in the body, the amounts are not sufficient to maintain normal life processes.

It was pointed out that the body must receive all eight of the essential amino acids simultaneously since the lack of a single one effectively stops utilization of all the others.

Sodium p-Aminobenzoate—USP material was reported moving in good business volume at prices slightly above those quoted early this fall. Lots of 1000 pounds were priced at $2.35 per pound while smaller quantities were reported ranging from $2.45 to $2.55. Consumer interest was good and supplies were adequate for the needs of the trade at this time.

Sodium Chloride—A major producer announced a price increase of 3c. per pound on USP material to be effective December 1 on spot and January 1 on contract. The new price will be 8c. per pound. Increases were said to be a reflection on increased costs of production and labor. Supplies were plentiful and moving in moderate business volume.

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Drugs, Fine Chemicals

widespread use in triple sulfa preparations and with antibiotics in combined chermotherapy. Production was up almost 50 percent for the first seven months of this year over a comparable period last year, Census Bureau reports show. Exports of sulfonamides were off 17 percent over this period with the largest drop in shipments of sulfadiazine.

January to July production of sulfa drugs totaled 1,208,000 pounds in 1955 as against a 1,798,000 pound output for the same period this year.

Exports, bulk and dosage, totaled 515,000 pounds for the first seven months of 1955, while this year exports amounted to 426,000 pounds.

Botanicals

Water soluble gums such as tragacanth and locust bean were reported in a very tight supply situation. The many grades of tragacanth, in particular, were estimated by one dealer to have increased 15 to 30 percent overall in the past month. In most cases, trade sources said that poor crops were responsible and that the Suez canal's being blocked had further aggravated the situation. No stocks of olibanum siftings were available and prices were nominal. One dealer reported having been told that locust bean crops in Spain had been spoiled by a severe frost this spring while there was no such report from Italy. Dealers in general agreed that material was scarce at this time and stocks were being used without replacement. Arabic, benzoin and myhrr gums were in adequate supply and prices were substantially unchanged. Karaya gum in all grades was in fair supply and moving at prices slightly under those quoted earlier in the year.

Domestic botanical drugs were in adequate supply except for those previously reported. These included cascara bark and golden seal root as well as wild cherry bark and white pine bark.

Arabic Gum—Demands were good and amber sorts were priced ranging from 19c. to 21c. while USP powder was 25c. to 27c. Supplies were light in some quarters although current demands were being met.

Locust Bean Gum—Supplies were very tight and material available was priced ranging from 48c. to 50c. It was reported that a severe frost this spring spoiled most of the Spanish crop. Another harvest, expected in February, could do much to alleviate the pressing needs in this market.

Olibanum Gum—Siftings were not available. A price of 20c. was nominal since stocks had been used without replacement. It was doubtful if shipments from Aden would be forthcoming any time soon. Tears were priced from 22c. to 30c.

Tragacanth Gum—Supplies were very tight and prices were up and expected to go higher. Dealers reported that several factors had brought about the present situation. A poor crop was reported in August and things were made worse by the confusion which resulted after the trouble in Egypt. Freight rates were up since shipments from Iran and South Africa (if available) would have to be sent the long way around. Dealers were pessimistic over chances for easing the situation for many weeks to come.

No. 1 ribbons were priced from $4.50 to $4.70 while No. 2 ribbons were $3.50 to $3.75 and No. 3 ribbons went for $3.25 to $3.40.

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BIMS Elects Harris

At a recent meeting of the executive committee of BIMS of Boston, Hart Harris, jr., of S. B. Penick & Co., New York, was re-elected chairman. The following members were added to the executive committee:—Warren Kell of Ungerer & Co., and T. Fred Baker, of Fritzsche Bros.

CMRA Tells Plans

—Continued from page 7

Most Sensitive to Foreign Competition—a Forecast," and "The Job Done and the Job to Do in Meeting Foreign Competition."

The subject for the afternoon meeting will be "The US Chemical Producer in Overseas Markets—What Are the Prospects?" Topics discussed will be:—"Where Are Foreign Chemical Markets?"; "Specific Foreign Markets for United States Chemical Producers—a Forecast," "How Can United States Producers Penetrate Foreign Markets?"; and "What Every Chemical Researcher Should Know to Study Foreign Chemical Markets."

This weeting will be open only to CMRA members. Guests will be invited from the Philadelphia area only.

l-Lysine Is Made

—Continued from page 5

cient supplementary lysine, therefore, to give cereal grains a protein balance similar to meat and fish would appear to be a method of improving the general efficiency of the American diet, and extensive research is currently underway in this area."

Pfizer l-lysine monohydrochloride, containing no d-lysine, is a pure white crystalline, 80-mesh powder with a guaranteed potency of not less than 98 percent. Under present price schedules, it will be priced from $12 per pound in 50-pound lots to $14 per pound in one pound lots.

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Crystalline d-Alpha Tocopheryl Acid Succinate, vitamin E in dry powder form.

Distilled Mixed Tocopherols Concentrate N. F., Type 4-50 and Type 4-34, containing respectively 500 mg and 340 mg of mixed *d*-tocopherols per gram (at least one half in *d*-alpha tocopherol form).

All are available for immediate shipment from stock. For details on the new vitamin E prices, write, wire, or phone *Distillation Products Industries*, Rochester 3, N. Y. Sales offices: New York, Chicago, and Memphis • W. M. Gillies and Company, Los Angeles, Portland, and San Francisco • Charles Albert Smith Limited, Montreal and Toronto.

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AMMONIUM ACETATE—10 bbls, Interstate Chemical Corp, Bremen
BICARBONATE—100 bgs, Chemical Manufacturing Co, Liverpool
500 bgs, Chemical Manufacturing Co, Middlesbrough
BIFLUORIDE—150 bgs, Interstate Chemical Corp, Bremen
CHLORIDE—110 bgs, I M Sobin Co, Rotterdam
PERSULFATE—50 dms, Lo Curto & Funk, Liverpool
AMYRIS OIL—5 dms, George Uhe Co, Miragoane
3 dms, Ungerer & Co, Port Au Prince
ANILINE DYES—33 dms, Ciba Co, Rotterdam
23 dms, Carbic Color & Chemical Co, Rotterdam
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3 dms, Hensel Bruckmann & Lorbacher, Hamberg
6 cks, C A Haynes, Hamburg
15 dms, Hensel Bruckmann & Lorbacher, Bremen
ANNATTO SEED—312 bgs, First National Chicago, Callao
65 bgs, Hanover Bank, Callao
ANTHRACENE—20 bgs, Kolon Trading Co, Gdynia
ANTIBIOTICS—169 cs, Chas Pfizer & Co, Cristobal
ANTIMONY OXIDE—300 bgs, C Gitlan, Antwerp
313 bgs, Antwerp
REGULUS—50 cs, Antwerp
952 cs, Sibenik
ARABIC GUM—254 bgs, Bank of N Y, Port Sudan
100 bgs, Chase Manhattan Bank, Port Sudan
199 bgs, Port Sudan
ARROW ROOT—6,000 bgs, Morningstar Nicol, Kingstown
ASCORBIC ACID—30 dms, Mitsubishi International Corp, Yokohama
BALSAM OF PERU—2 dms, Wessel Duval & Co, Corinto
BARBASCO ROOT—150 bls, Toronto Dominion Bank, Callao
254 bls, Kane Import Corp, Callao
BARDANAE ROOT—53 bls, S B Penick & Co, Rijeka
BAY OIL—1 dm, Royal Bank of Canada, Dominica
2 dms, W J Bush & Co, Dominica
1 dm, George Uhe Co, Dominica
2 dms, Citrus & Allied Essential Oil Co, Dominica
1 dm, Barclays Bank, Dominica
BEESWAX—14 bgs, Mutchler Chemical Co, Havana
44 bgs, H H Pike & Co, Tampico
35 bgs, Schutte & Focke, Ciudad Trujillo
60 bgs, L Weinstein, Valparaiso
25 bgs, Hollander Trading Corp, Port Au Prince
136 bgs, S Zeitlins Sons, Santos
68 bgs, Havana
117 blks, Assab
BELLADONNA LEAVES—81 bls, Meer Corp, Rijeka
BENZOIN GUM—54 cs, Olson Importing Co, Bangkok
20 cs, Meer Corp, Bangkok
101 cs, Meer Corp, Singapore
BILE, OX—12 dms, Wilson & Co, Santos
BISMUTH SUBCARBONATE—2 bbls, Standard International Corp, Hamburg
BLEACHING POWDER—25 dms, H A Gogarty, Yokohama
BOLDO LEAVES—60 bgs, S B Penick & Co, Valparaiso
BONEMEAL—533 bgs, A M Goldstein, Bombay
BORNYL ACETATE—1 cs, Lo Curto & Funk, Hamburg
BUTYROLACTONE—64 dms, Hensel Bruckmann & Lorbacher, Rotterdam
CAFFEINE—1 cs, Standard International Corp, Hamburg
2 kgs, Conray Products Co, Hamburg
CAMPHOR—50 cs, Wm J Maar, Keelung
20 cs, Chase Manhattan Bank, Keelung
60 cs, D Hauser, Keelung
30 cs, Lo Curto & Funk, Keelung
100 cs, P H Petry, Keelung
OIL—28 dms, Lo Curto & Funk, Keelung
CANANGA OIL—4 cs, Chemical Bank, Penang
CARAWAY SEED—200 bgs, Rotterdam
CARBONYL IRON—3 dms, Hensel Bruckmann & Lorbacher, Rotterdam
CASEIN—500 bgs, Chemical Bank, Buenos Aires
565 bgs, Tupman Thurlow, Buenos Aires
CASHEWNUT SHELL LIQUID—268 bbls, Durez Plastics, Cochin
203 tons, Fidelity Union Trust Co, Cochin
CASTOR BEANS—1,667 bgs, Baker Castor Oil Co, Salvador
OIL—300 tons, Woodward & Dickerson, Salvador
390 tons, Baker Castor Oil Co, Bombay
CHESTNUT EXTRACT—3,525 bgs, Barkey Importing Co, Genoa
CHLORINATED RUBBER—200 bgs, C M C Chemicals Inc, Liverpool
CINNAMON QUILLS—55 bls, Hismoco American Co, Colombo
75 bls, Fritzsche Bros, Colombo
50 bls, Lo Curto & Funk, Colombo
CITRONELLA OIL—25 dms, Givaudan Corp, Keelung
20 dms, Ludwig Mueller, Keelung
65 dms, Lo Curto & Funk, Keelung
10 dms, Internatio Rotterdam, Keelung
25 dms, Shulton Inc, Keelung
45 dms, Consumers Import Co, Keelung
15 dms, Van Ameringen Haebler, Keelung
CIVET—1 cs, George Lueders & Co, Aden
CLOVE—100 bgs, G M Fakra, Tamatave
CLOVELEAF OIL—41 dms, L A Champon & Co, Tamatave
20 dms, Givaudan Corp, Tamatave
5 dms, Tamatave
COALTAR ACIDS—8 dms, J M Rodgers Co, Hull
CREOSOTE—40 dms, J M Rodgers Co, Hull
DYES—13 dms, Nova Chemical Corp, Rotterdam
5 dms, Hensel Bruckmann & Lorbacher, Rotterdam
COBALT POWDER—10 cs, C Hardy, Havre
COCONUT OIL—600 tons, American Trust Co, Cebu
330 tons, Pacific Vegetable Oil Corp, Manila
23 dms, Procter & Gamble Co, Manila
460 tons, American Trust Co, Zamboanga
702 tons, Manila
CODLIVER—700 dms, Silmo Chemical Corp, St Johns
COD OIL—100 dms, Nopco Chemical Co, St Johns
COLUMBIUM OXIDE—4 cs, E I Dupont De Nemours & Co, Oslo
COPAL GUM—250 bgs, S Winterbourne & Co, Matadi
167 bgs, Internatio Rotterdam, Matadi
42 bgs, Wm H Scheel, Singapore
COPPER, OXIDE—4 dms, Rotterdam
CORIANDER SEED—330 bgs, Wm E Martin, Casablanca
1,250 bgs, Louis Furth, Genoa
625 bgs, Biddle Sawyer Corp, Genoa
CORN STARCH—748 bgs, Rotterdam
CORNMINT OIL—7 dms, Schimmel & Co, Keelung
m-CRESOL—23 dms, H A Gogarty, Liverpool
50 dms, D C Andrews, Glasgow
CRESYLIC ACID—785 dms, H A Gogarty, Liverpool
91 dms, Wm Cooper & Nephews, Glasgow
CUMIN SEED—100 bgs, Kellys America Ltd, Casablanca
435 bgs, C M Van Sillevoldt, Khorramshahr
CUTTLEFISH BONE—77 cs, Fries & Co, Havre
DAMMAR GUM—245 bgs, O G Innes Corp, Singapore
50 cs, Archer Daniels Midland Co, Bangkok
42 bgs, Gillespie Rogers Pyatt, Singapore
245 bgs, S Winterbourne & Co, Singapore
DANDELION ROOT—10 cs, Judson Sheldon Division, London
DEXTRIN—1,350 bgs, Guaranty Trust Co, Rotterdam
195 bgs, Rotterdam
EARTH COLORS—1,535 bgs, Naftone Inc, Bremen
ESPARTO WAX—80 bgs, Wm Diehl & Co, Glasgow
EUPHORBIA—6 bls, Parke Davis & Co, Tuticorin
FIGWORT HERB—10 bgs, Meer Corp, Hamburg
FISHLIVER OIL—3 dms, Consumers Import Co, Yokohama
FUEL OIL—113,950 bbls, Metropolitan Petroleum Corp, Punta Cardon
191,570 bbls, Metropolitan Petroleum Corp, Aruba
146,556 bbls, Esso Export Corp, Las Piedras
114,464 bbls, Asiatic Petroleum Corp, Curacao
258,126 bbls, Paragon Oil Co, Punta Cardon
276,147 bbls, Esso Standard Oil Co, Aruba
299,000 bbls, Esso Export Corp, Aruba
109,146 bbls, Esso Standard Oil Co, Puerto La Cruz
110,263 bbls, Paragon Oil Co, San Lorenzo
GALL—5 cks, Buenos Aires
OX—4 bbls, Tupman Thurlow, Havana
GALLNUTS — 288 bgs, Mallinckrodt Chemical Works, Lattakia
145 bgs, Balfour Guthrie, Lattakia
GARLIC OIL—10 cs, Tokyo Food Products, Kobe
6 cs, Magnus Mabee & Reynard, Yokohama
GELATIN—160 bgs, T M Duche & Sons, Havre
30 dms, Hensel Bruckmann & Lorbacher, Rotterdam
306 bgs, Transatlantic Animal By Products Corp, Rotterdam
620 bgs, B Young & Co, London
GLUE STOCK—233 bls, Manhattan Paste & Glue Co, Havana
238 bgs, Karr Ellis & Co, Liverpool
GRAPHITE—10 bbls, American Refractories & Crucible Corp, Bremen
600 bgs, Asbury Graphite Mills, Bremen
500 bgs, C Pettinos, Hong Kong
750 bgs, C Pettinos, Colombo
500 bgs, Asbury Graphite Mills, Colombo
500 bgs, Asbury Graphite Mills, Hong Kong
1,472 bgs, Asbury Graphite Mills, Tamatave
750 bgs, C Pettinos, Tamatave
GUAR GUM—2,262 bgs, Stein Hall & Co, Bombay
GYPSUM—420 bgs, Hammill & Gillespie, Liverpool
CRUDE—10,229 tons, U S Gypsum Co, Hantsport
9,963 tons, U S Gypsum Co, Little Narrows
3,426 tons, Allied Chemical & Dye Corp, Halifax
3,884 tons, National Gypsum Co, Dingwall
HYDROGEN PEROXIDE—165 dms, Hamburg
INSULIN—3 cs, Olin Mathieson Chemical Corp, Cristobal
IRON OXIDE—240 bgs, F L Kraemer, London
244 bgs, Landers Segal Color Co, Liverpool
ISONONYL ALCOHOL—1 cs, General Aniline & Film Corp, Rotterdam
J ACID—30 dms, Atlantic Chemical Corp, Genoa
JAVA SCARLET—5 dms, L & R Organic Products Co, Rotterdam
JUNIPER BERRIES—152 bgs, Irving Trust Co, Leghorn
184 bgs, Leghorn
KARAYA GUM—61 bgs, Thurston & Braidich, Bombay
LACTIC ACID—50 bbls, A Mellner & Co, Liverpool
LACTOSE—125 dms, Chas L Huisking & Co, Liverpool
9 bgs, Chas L Huisking & Co, Liverpool
LEMONGRASS OIL—23 dms, Givaudan Corp, Cochin
11 dms, Van Ameringen Haebler, Cochin
44 dms, Volkart Bros, Cochin
36 dms, Chase Manhattan Bank, Cochin
18 dms, Cochin
LICHEN ISLANDICUS—11 bls, Meer Corp, Rijeka
LIME OIL—1 dm, Norda Essential Oil & Chemical Co, Port Au Prince
LITHARGE—291 dms, Eagle Picher Co, Tampico
MACE—16 cs, A G Dunn, Singapore
16 cs, Wm E Martin, Singapore
28 bgs, A G Dunn, Singapore
24 cs, Karl H Landes & E Balint, Hamburg
13 cs, J W Phyfe, Rotterdam
54 cs, Karl H Landes & E Balint, Macassar
MAGNESITE—2,245 bgs, Bank of London & S A, Cochin
2,720 bgs, Goldwynne Chemical Corp, Cochin
6,670 bgs, Cochin
MAGNESIUM CARBONATE—75 cs, Chas L Huisking & Co, Liverpool
200 bgs, Reheis Co, Liverpool
MANGROVE EXTRACT—2,200 bgs, Saxe Cutch Corp, Sandakan
MARJORAM—161 bgs, Louis Furth, Vera Cruz
MENTHOL—20 cs, I R Boody & Co, Kobe
20 cs, Lo Curto & Funk, Kobe
65 cs, P A Dunkel, Santos
MERCURY—50 flks, Vera Cruz
MONTAN WAX—65 bgs, Strahl & Pitsch, Hamburg
22 bgs, Cornelius Wax Refining, Rotterdam
MYRRH GUM—133 bgs, Meer Corp, Aden
NAPHTHALENE—729 bgs, Antwerp
1,280 bgs, Rotterdam
NICKEL CHLORIDE—26 bbls, D Hauser, Bremen
NUTMEG—192 bgs, Karl H Landes & E Balint, Macassar
223 bgs, East India Trading Co, Macassar
131 bgs, Shippers Produce Corp, Macassar
26 bgs, Greene Trading Co, Port of Spain
22 bgs, East India Trading Co, Hamburg
80 bgs, George Lueders & Co, Singapore
50 bgs, East India Trading Co, Colombo
175 bgs, Kellys America Ltd, London
177 bgs, Mincing Trading Corp, London
112 bgs, J O Smith Intercean, London
ORANGE PEEL—40 bgs, S B Penick & Co, Cap Haitien
ORTHOVANILLINE—24 dms, H A Gogarty, Havre

PALM OIL—143 tons, Canada Packers Ltd, Matadi
159 tons, Procter & Gamble Co, Matadi
PALMKERNEL OIL—500 tons, Balfour Guthrie, Matadi
199 tons, Matadi
PAPAIN—75 hf chts, Meer Corp, Colombo
25 cs, Meer Corp, Colombo
25 hf chts, Prentiss Drug & Chemical Co, Colombo
23 cs, Prentiss Drug & Chemical Co, Mombasa
20 cs, American Ferment Co, Dar es Salaam
34 cs, Mombasa
13 cs, Dar es Salaam
PAPRIKA—170 bgs, M J Golombeck, Valparaiso
100 bgs, J Raphael & Sons, Valparaiso
50 bgs, Norwalk Mills, Valparaiso
100 bgs, Bank of Chile, Valparaiso
PAS ACID—22 cks, Havre
PATCHOULI OIL—24 cs, Agriscent Corp, Penang
3 cs, Olson Importing Co, Penang
2 dms, Florasynth Lab, Tandjong Priok
PEPPER, BLACK—1,010 bgs, E H Simpson & Co, Singapore
420 bgs, A G Dunn, Singapore
308 bgs, J H Schroder, Singapore
164 bgs, Internatio Rotterdam, Tandjong Priok
280 bgs, C Czarinkow, Singapore
140 bgs, George Uhe Co, Singapore
840 bgs, Internatio Rotterdam, Singapore
490 bgs, Borneo Sumatra Trading Co, Singapore
160 bgs, Reliable Mercantile Co, Cochin
80 bgs, C M Van Sillevoldt, Cochin
210 bgs, Far Eastern Rubber Importers, Singapore
80 bgs, M Golodetz, Cochin
140 bgs, R J Spitz, Singapore
170 bgs, Irving Trust Co, Singapore
80 bgs, Josten & Jansen, Colombo
280 bgs, Ludwig Mueller, Singapore
140 bgs, Otto Gerdau, Singapore
70 bgs, Bankers Trust Co, Singapore
210 bgs, C M Van Sillevoldt, Singapore
1,120 bgs, Singapore
120 bgs, Allepney
160 bgs, Cochin
RED—44 bgs, Mincing Trading Corp, Vera Cruz
70 bgs, Tampico
WHITE—35 bgs, Kellys America Ltd, Singapore
70 bgs, Internatio Rotterdam, Singapore
140 bgs, East India Trading Co, Singapore
70 bgs, J H Schroder, Singapore
70 bgs, Ludwig Mueller, Singapore
350 bgs, E H Simpson & Co, Singapore
70 bgs C Czarinkow, Singapore
210 bgs, A G Dunn, Singapore
140 bgs, Singapore
PETITGRAIN OIL—11 dms, Hollander Trading Corp, Buenos Aires
6 dms, A Verley & Co, Buenos Aires
PETROLEUM, CRUDE—169.144 bbls, Gulf Oil Corp, Las Piedras
155.000 bbls, Socony Mobil Oil Co, Puerto La Cruz
98.318 bbls, Metropolitan Petroleum Corp, Bachaquero
97,161 bbls, Hess Inc, Maracaibo
104.619 bbls, Esso Standard Oil Co, La Salina
15.206 tons, Metropolitan Petroleum Corp, Vera Cruz
599.383 tons, Esso Standard Oil Co, Puerto La Cruz
POTASSIUM PERCHLORATE—25 bbls, Chilean Nitrate Sales Corp, Antofagasta
PERMANGANATE—80 dms, Hamburg
PSYLLIUM SEED—67 bgs, Meer Corp, Bombay
HUSKS—312 bgs, Biddle Sawyer Corp, Bombay
PYRETHRUM FLOWERS—253 bls, Gulf Oil Corp, Mombasa
QUEBRACHO EXTRACT—3,056 bgs, H Elkan & Co, Buenos Aires
436 bgs, Tanimex Corp, Buenos Aires
517 bgs, Barkey Importing Co, Buenos Aires
1,159 bgs, Buenos Aires
RAWWOLFIA ROOT—800 bgs, Ciba Pharmaceutical Products, Matadi
RHUBARB ROOT—65 bgs, P H Petry, Bombay
RICE STARCH—147 bgs, American Key Products, Trieste
230 bgs, Aurora Manufacturing Co, Trieste
SAFROL—25 dms, Magnus Mabee & Reynard, Yokohama
SAGE LEAVES—500 bls, Trieste
SALVADOR BALSAM—3 dms, S B Penick & Co, Cutuco
SANDALWOOD OIL—14 cs, J Berlage, Madras
9 cs, Magnus Mabee & Reynard, Madras
SANDRAC GUM—4 bgs, Havre
SAPONINE—10 cs, Karr Ellis Co, Liverpool
SEEDLAC—1,250 bgs, East Asiatic Co, Bangkok
500 bgs, Toronto Dominion Bank, Bangkok
700 bgs, Mac Lac Co, Bangkok
500 bgs, Capitol Shellac Corp, Bangkok
250 bgs, Bangkok
550 bgs, Calcutta
SENNA CONCENTRATE—6 cs, Bard Pharmaceuticals, London
LEAVES—440 bls, Meer Corp, Tuticorin
SESAME OIL—100 dms, Amato Agency, Hamburg
SEED—256 bgs, Ideal Trading Co, Puerto Barrios
HULLED—300 bgs, Levy & Levis Co, Corinto
768 bgs, Louis Furth, San Juan Del Sur
350 bgs, R J Spitz, San Juan Del Sur
300 bgs, Bankers Trust Co, Beirut
30 bgs, Beirut
SHELLAC—200 bgs, Schwab Bros, Calcutta
400 bgs, C H Timm, Calcutta
100 bgs, P N Rowe, Calcutta
185 bgs, Gillespie Rogers Pvatt, Calcutta
50 bgs, Colony Import & Export Corp, Calcutta
100 bgs, Mac Lac Co, Calcutta
543 bgs, Wm Zinsser & Co, Calcutta
41 bgs, F H Paul & Stein Bros, Hamburg
SODIUM ALGINATE—20 cs, T M Duche & Sons, Oslo
BENZOATE—2 dms, Leviant & Co, Rotterdam
BICARBONATE—500 bgs, Chemical Manufacturing Co, Liverpool
CACODYLATE—3 cs, Havre
CYANIDE—120 dms, C Hardy, Havre
517 dms, Chemical Manufacturing Co, Middlesbrough
1,100 dms, Rotterdam
METHYLARSONATE—3 dms, Havre
SILICOFLUORIDE—334 bgs, Baird Chemical Corp, Kobe
SPERM OIL—1,196 tons, Werner G Smith, Sandefjord
193 tons, Pisco
STARCH—300 bgs, Morningstar Nicol, Rotterdam
SULFUR—10,039 tons, American Cyanamid Co, Coatzacoalcos
TALLOW ALCOHOL—13 kgs, Aceto Chemical Co, Liverpool
TAPIOCA—140 bgs, Kane Import Corp, Penang
900 bgs, Morningstar Nicol, Itajai
551 bgs, Manhattan Paste & Glue Co, Itajai
110 bgs, Stein Hall & Co, Itajai
378 bgs, Standard Brands Inc, Itajai
FLOUR—2,032 bgs, Chartered Bank of India, Bangkok
2,000 bgs, Manhattan Paste & Glue Co, Itajai
400 bgs, Stein Hall & Co, Itajai
2,000 bgs, American Metagraph Co, Itajai
100 bgs, Manhattan Paste & Glue Co, Liverpool
4,670 bgs, Madagascar Agencies, Tamatave
4,000 bgs, Stein Hall & Co, Bangkok
2,000 bgs, Internatio Rotterdam, Bangkok
1,916 bgs, Manhattan Paste & Glue Co, Bangkok
1,500 bgs, American Key Products, Bangkok
4,200 bgs, Morningstar Nicol, Bangkok
2,162 bgs, Bangkok
THEOBROMINE—3 dms, Rotterdam
THYROID POWDER—20 dms, Tutuer Bio Chemicals, Liverpool
TONKA BEANS—108 cks, Machado & Co, Port of Spain
4 bbls, Wessel Duval & Co, Ciudad Bolivar
TRAGACANTH GUM—5 cs, Eastern Mohair & Trading Co, Khorramshahr
TRICHLOROETHYLENE—34 bbls, Kolon Trading Co, Gdynia
50 dms, Chemical Manufacturing Co, Liverpool
9 dms, Ayerst Lab, Liverpool
TRIFOLI FLOWERS—10 bls, Meer Corp, Rijeka
10 bls, S B Penick & Co, Rijeka
TUNALIVER OIL—2 dms, Consumers Import Co, Yokohama
TUNG OIL—280 tons, C Tennant Sons & Co, Buenos Aires
ULTRAMARINE BLUE—20 bgs, Whittaker Clark & Daniels, Hull
UREA, SYNTHETIC—4,000 bgs, Chemical Manufacturing Co, Middlesbrough
VANILLA BEANS—12 cs, Frank Tea & Spice Co, Tamatave
53 cs, Packing Products Co, Tamatave
12 cs, Royal Bank of Canada, Dominica
10 cs, Chase Manhattan Bank, Cristobal
25 cs, Cristobal
VEGETABLE WAX—50 cs, Wm Diehl & Co, Kobe
VETIVER OIL—1 dm, Norda Essential Oil & Chemical Co, Port Au Prince
3 dms, Tamatave
VITAMINS—2 cs, Philips Export Co, Rotterdam
WATTLE BARK—1,106 bls, Capetown
WAX—175 ctns, H A Gogarty, Glasgow
22 bgs, Brazilian Development Corp, Rio de Janeiro
WHITING—1,000 bgs, Smith Chemical & Color Co, Hull
520 bgs, Hammill & Gillespie, Hull
1,460 bgs, Pluess Staufer, Antwerp
WITHERITE—112 tons, E I Dupont De Nemours & Co, Middlesbrough
WOOL GREASE—52 dms, National City Bank, Kobe
51 dms, National City Bank, Yokohama
57 dms, N I Malmstrom, Liverpool
50 dms, N I Malmstrom, Bremen
ZINC CYANIDE—100 dms, Chemical Manufacturing Co, Middlesbrough

Los Angeles

ARABIC GUM—300 bgs, Pleasantville
COPRA—600 tons, American Trust Co, Cebu
3,674 bgs, Balfour Guthrie & Co, Manila
6,000 bgs, Pacific Vegetable Oil Corp, Manila
560 tons, The American Trust Co, Iloilo
FERTILIZER—1,200 bgs, C M C Chemicals Inc, Manchester
LANOLIN—15 dms, U S Borax & Chemical Corp, Manchester
MOLASSES—2,321 tons, Southwestern Sugar & Molasses Co, Yokohama
PETROLEUM, CRUDE—17,000 tons, Union Oil Co of Calif, Vancouver

Philadelphia

AMMONIUM CHLORIDE—994 bgs, Chemical Manufacturing Co, Liverpool
ANTIMONY REGULUS—95 cs, Sibenik
ASBESTOS FIBER—1,205 bgs, Capetown
BEEF EXTRACT—220 cs, Tupman Thurlow, Montevideo
130 cs, Buenos Aires
BONEMEAL—200 tons, Baugh & Son, Buenos Aires
CARAWAY SEED—100 bgs, Rotterdam
CHESTNUT EXTRACT—400 bgs, Barkey Importing Co, Genoa
CHINA CLAY—7,850 bgs, Moore & Munger, Fowey
6,441 tons, Fowey
COCONUT OIL—249 tons, Manila
CODLIVER—700 dms, Silmo Chemical Corp, St Johns
GLYCERINE—149 tons, Buenos Aires
HEXYL ALCOHOL—32 dms, Rohm & Haas, Bremen
MAGNESITE—4,000 bgs, First National Cincinnati, Sibenik
PAPRIKA—270 bgs, Alicante
PEATMOSS—325 bls, Halfmoon Trading Co, Rotterdam
PETROLEUM, CRUDE—605,357 bbls, Gulf Oil Corp, Puerto La Cruz
113,496 bbls, Gulf Oil Corp, Las Piedras
144,623 bbls, Socony Mobil Oil Co, Covenas
112,883 bbls, Socony Mobil Oil Co, Mina Al Ahmadi
234,718 bbls, Atlantic Refining Co, Puerto La Cruz
135,369 bbls, Atlantic Refining Co, Pamatacual
114,829 bbls, Atlantic Refining Co, Banias
118,560 bbls, The Texas Co, Puerto La Cruz
QUEBRACHO EXTRACT—1,638 bgs, Tan American Corp, Buenos Aires
SHELLAC—50 bgs, Colony Import & Export Corp, Calcutta
100 bgs, Brown Bros, Bremen
SODIUM BICARBONATE—500 bgs, Chemical Manufacturing Co, Liverpool
UREA—1,100 bgs, Nylos Trading Co, Genoa
VANILLA BEANS—34 cs, Zink & Trieste, Tampico
WHITING—1,600 bgs, Pluess Staufer, Antwerp
ZINC OXIDE—1,400 bgs, Pigment Chemical Corp, London

San Francisco

CAROB FLOUR—20 bgs, Industrial Minerals & Chemical Co, Genoa
COPRA—1,098 tons, Procter & Gamble, Cagayande Oro
866 tons, Procter & Gamble, Cebu
269 tons, Balfour Guthrie, Cebu
1,000 tons, Pacific Vegetable Oil Corp, Legaspi
CAKE—89 tons, Balfour Guthrie, Cebu
89 tons, Internatio Rotterdam, Cebu
1,000 tons, Procter & Gamble, Cebu
EARTH COLORS—450 bgs, Castelazo & Associates, Bremen
GLUTAMIC AMINO ACID—1 dm, Getz Bros & Co, Bombay
MARJORAM LEAVES—6 bls, Marseille
MOLASSES—1,500 tons, Southwestern Sugar & Molasses Co, Takao
PEPPER, BLACK—105 bgs, H M Newhall & Co, Singapore
47 bgs, Hismoco American Co, Acapulco
PETROLEUM, CRUDE—603,198 bbls, Standard Oil Co, Sungai Pakning
SAGE LEAVES—38 bgs, Hismoco American Co, Genoa
SESAME SEED—300 bgs, B C Ireland, San Juan del Sur
325 bgs, B C Ireland, Corinto
650 bgs, H M Newhall & Co, Corinto
SHELLAC—50 bgs, Calcutta
TAPIOCA FLOUR—1,670 bgs, Brown Bros, Bangkok
1,350 bgs, American Key Products, Bangkok
TRICHLOROETHYLENE—200 dms, Miny Corp, Genoa

Texas-U.S. Chemical Co. Buys N.J. Research Site

Texas-U. S. Chemical Company has purchased the twenty-six-acre Sedgefield Manor property in Parsippany-Troy Hills Township of Morristown, N.J., for the construction of a research center.

Work will start immediately to convert space in a house on the property into offices. Construction of a center for research on synthetic rubber and petrochemicals will get under way next year.

Texas-U.S. owns and operates a synthetic rubber plant and pilot plant in Port Neches, Tex., and is a joint owner of the butadiene plant also located in Port Neches. The company is jointly owned by Texas Company and United States Rubber Company.

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- CRESYL o-SILICATE
- CUPROIN
- CYANOACETYLGUANIDINE
- CYCLOOCTATETRAENE
- CYSTINYLDIGLYCINE
- CYTASE
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- DEHYDROISOASCORBIC ACID
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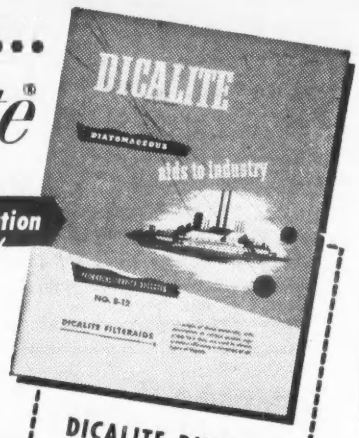

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Obituaries

Dr. Joseph Arthur LeClerc

Dr. Joseph Arthur LeClerc, internationally known agricultural scientist, who worked for the Bureau of Chemistry from 1903 until 1919, died November 16 in Jacksonville, Fla. He was eighty-three years old.

From his position with the government, he went to Miner-Hillard Milling Company, Wilkes-Barre, Pa., as chief chemist. From 1928 to 1943 he was senior chemist of the Department of Agriculture's bureau of agriculture, chemistry and engineering in Washington.

Henry Schenck

Henry Schenck, founder of Dip-It, Inc., Stamford, Conn., which he founded in 1922, died November 16 in that city. He was seventy-eight years old.

Samuel Weiss

Samuel Weiss, nationally known expert on coke and coal chemicals and president of the American Coke and Coal Institute, died November 17 in Washington, D. C. He was sixty-four years old.

First going to Washington as an industrial analyst with the Office of Price Administration in 1941, Mr. Weiss also served as chief of the fuel section in the steel division of the War Production Board and as chief of the coke division of the Solid Fuels Administration for War.

Mr. Weiss headed the American Coke and Coal Institute since it was founded in 1945. He was associated for many years with Semet-Solvay division of Allied Chemical & Dye Corporation.

Allen Kinney Brehm, retired vice-president and treasurer of Carthage Hydrocol, Inc., New York, died November 19 in Tryon, N. C. He was fifty-nine years old.

Dr. H. Everton Hosley, retired dentist and former treasurer, director, and for a short time vice-president of Kolynos Company, New Haven, Conn., a division of American Home Products Corporation, died November 20 in West Palm Beach, Fla. He was eighty-four years old.

William H. Pavitt, retired vice-president of Wilputte Coke Oven Division of Allied Chemical & Dye Corporation, New York, died November 19 in St. Augustine, Fla. He was with Wilputte from 1913 until 1930, when he retired.

A. V. Phillips, retired director and veteran of sixty-two years service with Bemis Bro. Bag Company, St. Louis, Mo., died November 15 in that city. He was eighty-eight years old.

S. Whitfield Quisenberry, supervisor of maintenance sales in the finishes division of E. I. duPont de Nemours & Co., Wilmington, Del., died November 19 in that city. He was fifty-eight years old.

Henry F. Rath, retired president of Cane Creek Oil Company, died November 17 in Santa Monica, Calif. He was seventy years old.

Henry W. Swanson, manager of the agriculture department of White Laboratories, Inc., Kenilworth, N. J., died November 19 in Plainfield, N. J. He was sixty-three years old.

Copper Sulfate Facility Is Expanded by Republic

Republic Chemical Corporation, New York, has completed installation of equipment expanding the producing capacity of its Baltimore, Md., copper sulfate plant.

New facilities constructed include an electric furnace for copper purification, filters, crystallizers, and driers, as well as equipment for screening and bagging.

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Oils, Fats and Waxes

Excellent demand for export continued to feature the oils and fats market last week. Active trading for shipment took place for cottonseed and soybean oils, resulting in a fractional advance. Potential buying for export also was a contributing factor. Peanut oil also received export interest and with offers scarce bids were raised sharply. Corn oil was stronger, reflecting the higher cost of competing oils. Producers advanced shortening in bulk lots 1 cent per pound due to the recent advances of vegetable oils. Crude coconut oil was steady, with fair volume of business transacted at unchanged quotations. Copra also was well held.

Tallow and greases were stronger and fractionally higher. Trading was reported moderate both for domestic and export at higher quotations, chiefly for export. Spain was authorized to purchase 12,700 metric tons for shipment November through June.

Consuming demand for Brazilian castor oil was active. Market remained strong with the higher cost and scarcity of offers for shipment. Trading was active here for prompt delivery. Domestic grades also were strong. Improved trading in tung oil resulted in a sharp advance. The local market also reflected sold up Argentine oil for prompt shipment due to heavy buying for European account. Oiticica oil was active and higher. Rapeseed oil also was in demand for European delivery and market was steady at the recent advance. Interest in linseed oil lagged, but price schedule was unchanged, despite lower flaxseed market.

PriceTrends

Advanced

Cocoa butter, 3c. per lb.
Copra, $2.50 per ton.
Greases, ½c. per lb.
Lard, 3/5c. per lb.
Oil, Coconut, crude, ¼c. per lb.
Corn, crude, ½c. per lb.
refd., ½c. per lb.
Cottonseed, crude, ⅜c. per lb.
refd., ⅜c. per lb.
Oiticica, 3/10c. per lb.
Peanut, crude, 1c. per lb.
refd., 1c. per lb.
Soybean, crude, ⅝c. per lb.
refd., ⅝c. per lb.
Tung, ¾c. per lb.
Tallow, ¼c. per lb.
Wax, carnauba, yellow, 1c. per lb.

Reduced

Wax, carnauba, crude, Ceara, 1c. per lb.
Parnahyba, 1c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Nov. 25, 1955
120.78	120.76	119.78	102.49

Comparative Price Indexes

For Current Prices see Page 9

Vegetable Oils

Castor—Firm tone prevailed in this market, reflecting the strength of replacements. Domestic grades were maintained at the recent advance of 1c. per pound. Trading was reported moderate for actual needs. Brazilian oil was sold at 20½c. per pound tankcars, New York, prompt delivery.

Coconut—Crude remained steady, with trading noted at 11⅜c. per pound, tankcars, f.o.b. Pacific coast, November-December shipment and 11½c. asked. Tankcars were offered at 12½c. per pound, New York, prompt delivery.

Corn—Trading was spotty. Crude was higher with sales at 14¾c. per pound, tankcars, f.o.b. mills. Refined oil was higher at 18.34c. per pound, New York basis, prompt.

Cottonseed—Heavy demand for export combined with active refiners buying further strenghtened this market and quotations were advanced fractionally for all positions. July forward deliveries reached new highs for the season. Exporters also absorbed large lots of crude and bleachable cottonseed oil for shipment from the Pacific coast. Futures were strenghtened by active speculative demand and short covering which readily absorbed hedges and profittaking. Consuming demand for cashoil also improved and refined salad was lifted to 17¾c. per pound, tankcars, New York, prompt delivery.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, November 23, follow:—

	Sales	High	Low	Close
		—Cents per pound—		
Dec.	315	16.71	15.85	16.71S
Jan.	13	16.72	15.49	16.55@16.76
Mar.	484	16.83	16.13	16.81S
May	407	16.90	16.19	16.87S
July	144	16.88	16.29	16.84@16.86
Sept.	30	16.45	16.10	16.39@16.50
Oct.	4	16.25	16.25	16.25@16.35
Dec. (1957)	7	16.20	16.05	16.10@16.25

Total sales and switches, 1,404 contracts.

Exporters and refiners were large buyers of crude oil and quotations advanced ¼c. per pound. Sales were made up 14c. per pound, tankcars, f.o.b. mills in the Valley and Lubbock, Texas, and 14¼c., Waco. In the southeast market was nominal at 14⅜c.

Linseed—This market was quiet. Price schedule was unchanged despite lower flaxseed. Raw oil was offered at 13.7c. per pound, tankcars, Minneapolis, November-December delivery. Buyers continued to purchase oil in a hand to mouth manner, but withdrawals against former contracts continued to move in heavy volume.

Flaxseed — Prices declined 5c. per bushel. Offers continued light.

Minneapolis.—Cash flaxseed prices were reduced 5c. a bushel and crushers filled nearby requirements ahead of the decline. Bids were at $3.40 a bushel, spot and to-arrive, basis Minneapolis, but offerings were at a virtual standstill following the drop. Big question in the market was whether crushers would be able to meet future needs without advancing bids. Only 2 cars were offered in the spot cash market, but to-arrive booking reached 75 cars and 63,850 bushels in trucklots ahead of the 5c. drop.

Receipts and shipments of flaxseed, in bushels, were as follows:

	Receipts		Shipments
	1956-57	1955-56	1956-57
Past week	266,400	357,000	36,000
Since Sept. 1	10,771,800	11,109,000	1,294,200

Oiticica—Trading was more active and prices were raised fractionally to 14.8c. per pound, tankcars, New York, prompt and later delivery. Drums were advanced to 16¼c.-16¾c. per pound, spot according to quantity.

Olive — Steady tone prevailed locally. Spanish oil was held at $3.30 to $3.40 per gallon, drums, duty paid, spot, as to quality and quantity. Reports from Spain stated that the government will set aside from 50,000 to 75,000 tons of first pressed oil for domestic consumption and offers for shipment were not expected until January or February. Offers for shipment from Tunisia have been materially reduced due to active demand from France and Italy. This brought more interest in replacements. Recent sales of Tunisian oil were reported at $75 per 100 kilos, drums, c. and f. New York December shipment and $73, for January. Production figures of Spanish production have been reduced to 325,000 tons against early estimates of 350,000 to 360,000 tons.

Peanut—Recent heavy trading for export, materially reduced offers of crude. Tankcars sold up to 17¾c. per pound, f.o.b. mills, prompt delivery and 18c. asked. Refined oil was higher at 21c. per pound, tankcars, prompt delivery.

Soybean—Active demand for export created a firmer tone and trading took place at a fractional advance. Crude was sold at 14⅛c. per pound, tankcars, Decatur, November and December with January-February held at 13⅞c. Refined salad was lifted to 16⅞c. per pound, tankcars, New York, prompt.

Soybean Oil Futures

Sales and prices of crude soybean oil futures (new contract) in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, November 23, follow:—

	Sales	High	Low	Close
		—Cents per pound—		
Mar.	23	13.70	13.15	13.69S
May	8	13.42	12.91	13.40S

Total sales, 31 contracts.

Tung—Stronger Argentine market, coupled with tighter supplies here further stiffened this market and quotations were

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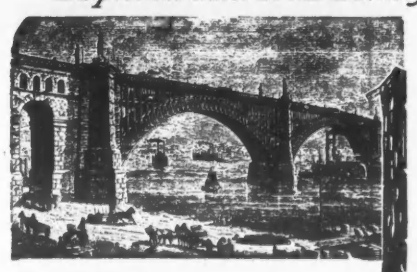

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Acid Value	198 – 203
% F.F.A. as Oleic Acid	99.5 min.
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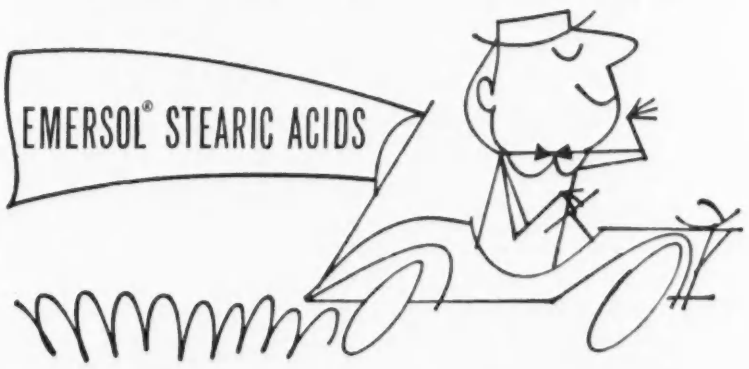

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H-11

Oils Fats and Waxes

advanced ¾c. per pound. Demand was active with sales reported up to 23¾c. per pound, tankcars, New York, prompt delivery. Holders were asking 24c. Europe has been a heavy buyer of late for shipment from the Argentine. Drums also were higher, ranging from 25½c. to 26c. per pound, spot, as to quantity.

Miscellaneous

Castor Beans—This market continued firm, reflecting scarcity of offers for shipment. Shipments continued merely nominal around $170 per ton, f.o.b. Brazilian port.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:—

	Pounds	
	Beans	Oil
Last week	250,050	1,380,000
Previous week	2,850,000	1,396,000
Corresponding week, 1955	195,000	2,278,000
Total this year	40,549,650	69,611,000
Corresponding period, 1955	74,952,110	44,147,000

Cocoa Butter—Prices were stronger and advanced to 65c. to 68c. per pound, spot, according to quantity. Trading was more active.

Copra—Shipments were maintained at $155 per ton, c.i.f. Pacific coast. Trading was moderate.

Fats and Greases

Greases—Trading was spotty, with moderate volume traded at higher prices. Export interest was fairly active with actual business light. Yellow grease high acid sold at 7c. per pound, tankcars delivered and 7⅛c. for low acid. Choice white all hog ranged from 8½c. to 8⅝c., same basis.

Lard—Fluctuations were narrow, with prices closing sharply higher. Cash lard was quoted at 14c. per pound, drums, Chicago.

Oleo Oil—Business was reported slow. Prices were without changes and quite steady. Extra was quoted at 19c. to 19½c. per pound, prompt delivery, drums, and oleo stearine, 14c. to 14½c., same basis.

Tallow—This market was strong and higher. Trading in bleachable fancy was reported at 8¼c., tankcars delivered for dealers' account. Extra ranged from 7⅜c.

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Oils, Fats and Waxes

to 8c.; special was held at 7¾c. and No. 1, 7⅛c. to 7¼c., same basis, Edible tallow was quiet and nominal at 13½c., same basis. Fancy was maintained at 9¾c., drums, f.a.s. Spain was allocated 12,700 metric tons for November through June shipment.

Tallow Futures

Sales and prices of bleachable tallow futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, November 23, follow:—

	Sales	High	Low	Close
		—Cents per pound—		
Dec.	4	8.19	8.10	8.20@8.30

Total sales, 2 contracts.

Cake and Meal

Linseed Meal—Market steady. Demand active.

Minneapolis.—Supplies of linseed meal were not plentiful and the arrival of winter weather stepped up demand somewhat. Re-sale offerings were available, however, at 50c. to $1 under crusher asking levels. Withdrawals against existing contracts continued at active pace. Crushers quoted 36 percent extracted linseed meal at $54 to $54.50 a ton for December shipment; $53.50 for January forward. Expeller meal, 32 percent protein, $61.50 for December; $60.50 for January-March.

Shipments of linseed meal, in pounds, were as follows:

	1956-57	1955-56
Past week	16,800,000	14,880,000
Since Sept. 1	177,900,000	213,001,000

Waxes

Reports from Brazil stated the government reduced the floor price of No. 3 Ceara crude wax from $65 per ton to $60, unsettled the local market and caused consumers to retreat to the sidelines. Prices were easier for fatty and crude Ceara and Parnahyba declined 1c. per pound. Yellows were not affected and prices were lifted 1c. per pound in some quarters for good quality wax. Crude Ceara was quoted at 68c. to 69c. per pound, spot and Parnahyba, 69c. to 70c., same basis. Yellow Ceara ranged from $1.43 to $1.45 per pound and Parnahyba, $1.46 to $1.48, spot. Crude beeswax continued in a stronge position, with offers for replacement scarce and restricted to future shipment. Refined beeswax was unchanged, but firm. Candelilla was quiet and limited stocks of crude were held around 70c. per pound and refined, 73c. per pound, spot as to quantity.

Oronite Eastern Sales Area Divided Into Two Districts

Oronite Chemical Company, San Francisco, Cal., has announced division of its eastern sales region into two sales districts and listed key promotions resulting from the change.

E. J. Van Buskirk has been appointed manager of the northeastern district, with headquarters in New York. He will handle Oronite's sales program in New York, northern New Jersey, the New England states, and eastern Canada.

B. W. Colaianni has been named manager of the southeastern district with offices in Wilmington, Del. He will handle company operations in southern New Jersey, eastern Pennsylvania, and the south.

J. H. Selby has been appointed manager —special accounts, eastern sales region. J. R. Stitt will continue to supervise Oronite's eastern regional sales and coordinate the activities of the new sales offices.

MCA to Honor

—*Continued from page 5*

dicate that, if the percentage of those graduating in science or technology does not double in the next few years, then the United States will not be so dynamic and so enterprising as it should be and must be in the boiling world of today."

To bring about increased understanding between industry and schools at the local level, the MCA is preparing a handbook on industry-education relationships. T. C. Fetherston, of Union Carbide, expressed the committee's belief that the manual will promote the effective utilization of MCA's education-aid materials and ideas to a level which no other program of this kind has achieved.

"Nothing like our proposed handbook now exists," Mr. Fetherston stated. "Such a thing has been needed for a long time, but so far as we have been able to determine, no industry group has yet seen the problem in exactly the light that our studies, made with the assistance of professional educators, have revealed it to us."

Widespread acceptance of MCA's supplementary materials for general science classes at the junior high school level was reported by William E. Chace, MCA's director of education. Offered less than a month ago, these materials have been requested by over 3,600 institutions—public, private and parochial schools and teachers' colleges—located in every state.

They are being used by more than 110,000 students. "The program," Dr. Chace said, "is the first of the association's ventures to get into operation—a step encouraged by educators who pointed out that when youngsters reach junior high school, they start making decisions about their future careers."

A similar program for teachers and students of high school chemistry is now being developed by the association.

Enthusiastic financial support for the entire MCA education program by member companies was reported by Frank L. Linton, of Allied Chemical & Dye Corporation.

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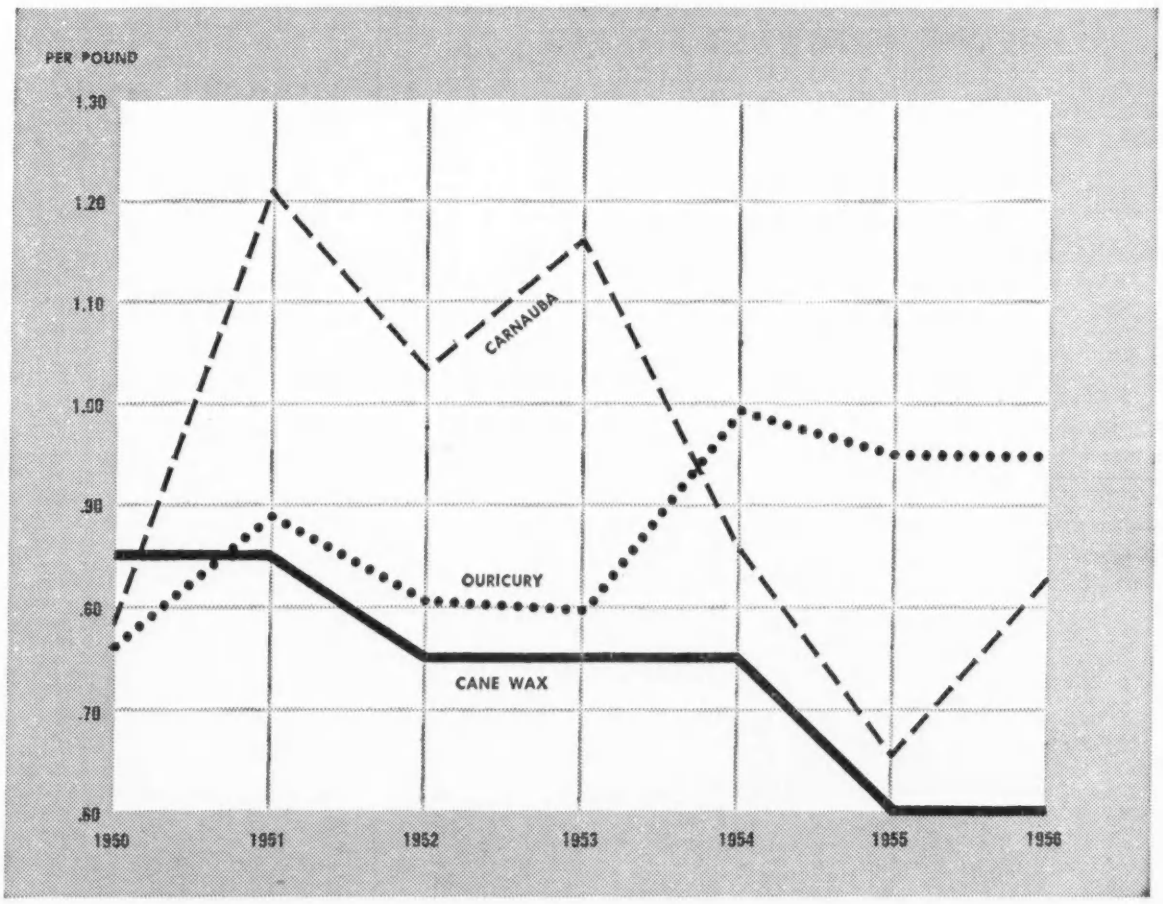

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Coatings Materials

Zinc and lead pigments reflected last week the calmer tone of trading in basic metals. As the situation in the Middle East became more stable, there was less speculative buying of metals. This, in turn, steadied the price of oxides and brought to an end the spurt of heavy buying. Seasonable sales were reported, with all prices unchanged and steady. The market picture for other coatings materials was in general not different from the previous week. A notable exception was casein, which advanced 1½c. above the former price on a wave of brisk buying interest.

No further announcements have been made as yet concerning the price of chrome colors. To date, two producers have announced 1c. to 2c. advances to be made effective November 1 and November 10. Green chrome is to be hiked 2c. per pound in the chemically pure grade, with other varieties moved up 1c. per pound. Orange, yellow and zinc chrome will each be advanced 1½c. per pound. A date has not been set for implementation of an advance in iron blues, which is believed to be impending before the end of the year. One maker has reported that the increase will definitely be made and will probably be in the amount of 2c. per pound.

Although dioctyl phthalate remains loose in supply and easy in price, the outlook for plasticizers in general is good. This is evidenced by current sales, still moving briskly, and good prospects for a continued high rate of automobile manufacture and construction work. These same factors contribute a firm outlook to the synthetic resins market. For last week, producers reported particularly good business in alkyds and pentaerythritol.

Prime Pigments

Dry Colors—Iron oxides and mineral earth pigments have been moving in good volume since the first weeks of October. For some manufacturers, the sales level, in dollar value, is above last year's. There have been no price changes during the current quarter, but in general, quotations have been firm.

Green Chrome—Quotations are set to be advanced 1c. to 2c. per pound on December 1 and December 10 by two leading makers, to offset rising costs. Another leading manufacturer reported it was studying the situation and would have an announcement sometime this week. In the changes referred to, chemically pure green chrome will be moved up 2c. per pound, while the other varieties will be increased 1c. per pound. To date this year, the only other change in chrome colors has been an advance in chromium oxide, from 44¾c. per pound to 45½c., made effective Nov. 12.

Iron Blue—Price advances, reportedly 2c. per pound, are under consideration by several producers. Trade sources expect a decision imminently. In the face of increased production costs, these colors were advanced 5c. per pound at the beginning of the year and increased an additional 2c. about six months ago. Current sales are seasonally good, with supplies in balance.

Lead Pigments—This market has settled down to a routine level in response to a quieter price situation abroad. Previously firm quotations of lead oxides were described last week as steady against seasonable sales. Supplies were ample for all market needs.

Lakes and Toners—A major producer said last week that a first quarter price list would be forthcoming shortly. Some revisions are expected but no indication has been given as to which materials would be changed. Business during the current season has been running about even with the corresponding period of last year. While dollar sales have improved, the difference is probably accounted for by advances in the price index of the economy.

Orange Chrome—A 1½c. advance, scheduled for December 1 and December 10, will bring this color to 35c. per pound.

Titanium Dioxide—Producer inventories are in close balance with a seasonably brisk sales rate. Quotations have been steady since the first quarter.

Yellow Chrome—With orange chrome, this color will be advanced 1½c. on December 1 and December 10. The increases will offset higher costs absorbed since the first of the year.

PriceTrends

Advanced
Casein, imp., Arg., 1½c. per lb.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 25, 1955
100.30	100.30	100.14	97.46

For Current Prices see Page 9

Zinc Chrome—Quotations on this material will be hiked 1½c. per pound, effective December 1 and December 10.

Zinc Pigments—The swift sales pace of the previous week has settled down to a normal level, producers reported. A more stable price outlook is said to have eliminated inventory building by consumers.

Synthetic Resins

Alkyds—Brisk buying interest is still evident in this market. Producers hope to see the present level of interest sustained through the remaining week of November and part of December. In the last price list issued, dated November 7, quotations were unchanged from previously. Supplies have been ample throughout the year.

Ester Gum Solutions—Spot prices were advanced by one maker ¼c. per pound, effective November 7. As previously reported, contract quotations will be similarly advanced January 1.

Pentaerythritol—A reduction in the price of glycerine has not affected this market. The business volume is seasonally good, with some outlets showing higher consumption than for the same period of last year. The first pentaerythritol plant to be located in the midwest recently commenced production. Due to reduced transportation costs, the new facility is expected to encourage increased use of the resin.

Lacquer Materials

With the exception of dioctyl phthalate all plasticizer markets are in a steady position. The former material, despite a recent 2c. reduction across the board, is still subject to price shading. Diethyl and dimethyl phthalate are firm at recently advanced quotations, and are reported to be encountering good demand. Business in citrates continues to expand, notably in the direction of packaging materials. The outlook for plasticizers in general continues good, as evidenced by the level of automobile production and the seasonal pickup in construction activity.

Fillers and Inerts

Asbestos—Production and shipments from Canadian mines is reported to be running at a rate almost identical with 1955. A slight increase in output of long fiber grades has been offset by a drop in short fiber output because of strikes at several major plants. Demand for insulation has recovered from a mild third quarter recession, moving upwards in response to increased construction activity. Asbestos paper and cement products are still low, the latter running ten to fifteen percent below last year's sales. While government purchases of asbestos textiles have continued to decline, sales to industry are moving in good volume. The supply position is good for nearly all grades.

Miscellaneous

Casein—This material scored a sharp advance of 1½c. per pound a week ago, bringing the quotation up to 25c. to 26c. per pound, duty paid, December shipment. Consumers were said to have bought heavily to fill depleted inventories. Stocks in the Argentine are ample but heavy rains have been delaying delivery of the material to shipping points. This factor may have some bearing on the current strength of the market.

Exports of casein from Argentina are expected to show a ten million pound decline this year, reflecting increased European production and declining imports by

America. High prices early in the year are believed to have deflected a share of the business to soya protein.

Naval Stores

Production of gum naval stores during October totaled 13,240 barrels of turpentine and 44,830 drums of rosin, as reported by the Department of Agriculture. Wood turpentine output, at 41,890 barrels, was 14 percent higher than during the previous month, but four percent below the corresponding month of last year. During October, 140 barrels of crude sulfate turpentine were burned at plants. October 31 stocks of both gum and wood turpentine were smaller than on September 30, while rosin stocks remained at approximately the same level. As compared with the preceding month, CCC turpentine holdings were down 910 barrels and "all other" gum turpentine stocks down 4,000 barrels.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Nov. 16	Mon. Nov. 19	Tues. Nov. 20	Wed. Nov. 21	Thur. Nov. 22[1]
Drums—					
K		$8.18	...	...	...
M	$8.19§	...	$8.22	...	...
WG	...	8.48	...	$8.425§	...
WW	8.77§	...	...	8.87 §	...

Tankcars (for week ended November 16)—
M or better, $7.75

Sales, USDA
1,320* 549* 160* 860* ...

New York
(per 100 lbs., c.l., Friday)
B through M, $9.30; N, $9.40; WG, $9.60; WW, $9.90

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	...	...	...	.57	...
Sales	...	...	...	6,000¶	...

New York, Friday, per gal. 7 lbs., tankcars, 67½c., l.c.l., 78c.

* Drums equivalent. ¶ Gallons. §Average price.
[1] Market closed for holiday.

Borden Chemical Division Sets Up Research Group

The chemical division of Borden Company, New York, has established a forest products research group for extensive, long-range work. Immediate objective of the group is the development of resin and polymer products adapted to new applications.

The forest products research group will be headed by Dr. George Kitazawa, former research physicist for Gillette Company. It will employ polymer and synthetic chemistry in its research. Plans call also for the use of radioactive tracer techniques for durability, dispersion and other tests.

Paint Research

—Continued from page 4

board of directors, and according to Mr. Glaser, the board has instructed the committee to start work immediately on the details for a federation-sponsored Paint Research Institute.

Purpose of the institute would be to conduct broad research and to foster technical education for the benefit of the entire decorative and protective coatings industry.

Members of the FPVPC long-range planning committee are: Newell P. Beckwith of Rinshed-Mason Company, Detroit, Mich.; Hiram P. Ball of Ball Chemical Company, Pittsburgh, Pa.; Mr. Glaser of Midland Industrial Finishes Company, Waukegan, Ill.; C. Homer Flynn, executive secretary of the federation, and Calvin J. Overmyer of Elliott Paint & Varnish Company, Chicago.

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Aluminum					
Barium					
Lead					
Lithium					
Lithium Hydroxy					
Calcium					
Magnesium					
Sodium					
Cadmium					
Zinc					
% Metal					
Color					
Clarity					
Acid No.					
Sp gr.					
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Acetone extr.					
Fineness					
Sedimentation					
Soft. pt.					
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Polyethylene Film Item Developed by Spencer

A higher density polyethylene for film that is stiffer, boilable, and less permeable is now being produced by Spencer Chemical Company, Kansas City, Mo. The new film is the result of Spencer's recent development in the production of high density polyethylene in the conventional high pressure type process.

The film can withstand temperatures up to 240 degrees Fahrenheit. It is two and one-half times stiffer, less than one-half as permeable to gases and water vapor, and at least three times more greaseproof than conventional polyethylene, Spencer said. The properties of the new resin are those which generally relate to density which is increased to .938 as a result of Spencer's development. Tradenamed, "Poly-Eth Hi-D," 2504, the new resin is available in commercial quantities at a price of 47c. per pound in truckload quantities.

S. B. Penick Announces Sanitizer Development

The introduction of a new sanitizer of particular interest and application to the pharmaceutical manufacturing industry has been announced by S. B. Penick & Co., New York.

"Heliogen Sanitizer" is a near-white powder which dissolves instantly in hard or soft water, forming a crystal-clear solution containing diatomic iodine, a non-toxic and powerful sanitizer. It is fully effective in either acid or alkaline solutions.

The need for hot water is eliminated, since "Heliogen Sanitizer" is active at prevailing temperatures, summer or winter. Unlike most sanitizers in current use, it is non-corrosive, non- irritating to the skin, and leaves no odor, taste, or film. Quick-acting, it is equally effective against bacteria, viruses, and fungi, destroying these microorganisms within fifteen seconds, according to Penick.

Air Pollution Foundation Elects Director, Chairman

The board of trustees of the Air Pollution Foundation has announced the appointment of Dr. W. L. Faith as managing director of the independent scientific research organization.

Faith has served as chief engineer of the foundation since the organization began operations in 1954. He succeeds Dr. Lauren B. Hitchcock, who has resigned to return to private consulting practice in the industrial research and development field.

The trustees at the same time elected A. J. Gock, director of the Bank of America, to the post of foundation president and chairman of the board. J. Howard Edgerton, president of California Federal Savings & Loan Association, was named vice-president.

Frank King, president of the California Bank, was elected both a member of the board and treasurer. Other new board members are Welton Beckett and Dr. Edward C. Rosenow, jr.

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Textile, Leather Chemicals

Conditions in the textile and leather chemicals market continued on a steady basis last week. Business was quite active for prompt needs, with consumers showing more interest in forward delivery. Prices remained strong for the entire list. Sulfonated castor oil advanced 1 cent per pound due to the higher cost of oil. Production of potato starch continued at capacity and was moving steadily against current orders. New business also improved for prompt and later delivery. Prices remained unchanged and steady. Interest in tapioca flour was centered in Siamese grades while Brazilian continued scarce and merely nominal due to absence of actual trading. Other sizing materials were in good request and well held at former levels.

World raw wool production for the 1956-57 period was forecast about 4 percent higher than the previous season by the Department of Agriculture. This increase in world wide supply rise will be the ninth in succession. The wool production in the United States on the other hand is expected to be down roughly 1 percent from this year. World consumption of raw wool during the first half of 1956 was estimated at about 9 percent above 1955, while consumption in the United Kingdom was a little lower. In the United States mills have been using more apparel and carpet wool this year than last. From 1946 to 1954 apparel wool declined 56 percent while carpet wool consumption increased 14 percent.

Shoe production in October is estimated to have totaled 49,800,000 pairs, a gain of 3.3 percent over October 1955 by Tanners Council. The increase over a year ago showed up in all categories except in infants' and babies' shoe output which declined approximately 6 percent. Based on reports from manufacturers on their scheduled production, it is estimated that November output will be about 46 million pairs. This would represent an increase of 7.2 percent over November, 1955, when 42,921,000 pairs were produced. A year ago, however, production reflected labor difficulties. At the end of ten months, 1956 shoe production was 1.7 percent ahead of last year. With the November estimate included, the eleven months' total for 1956 will be 542,878,000 pairs as compared with 531,422,000 in the same period of 1955, a gain of 2.2 percent.

PriceTrends

Advanced
Oil, castor, sulfonated, 1c. per lb.

Reduced
None.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 25, 1955
108.55	108.55	108.55	105.33

For Current Prices see Page 9

Chemicals

Bichromates—Producers continued to report good volume moving into consuming channels against current contracts. Interest in next year needs also was quite active. Prices were without change and firm.

Sodium Acetate—Moderate demand was noted for spot delivery. Market remained unchanged and steady.

Sodium Hydrosulfite—Buying interest was fairly active chiefly for prompt delivery. Market was firm and quotably unchanged.

Sulfonated Oils—Sulfonated castor oil was stronger and boosted 1c. per pound due to higher cost of basic oil. Other grades were without change and steady.

Sizing Materials

Albumin Blood—Consumers continued to absorb the bulk of production. Market was unchanged and steady. Prices ranged from 65c. to $1 per pound, depending upon quantity.

Corn Starch—Demand continued at a steady pace for prompt requirements. Market was firm and quotably unchanged. Pearl was quoted at $7.27 per 100 pounds, paper bags, carlots, New York, and powder $7.39, same basis. Less carlots were 15c. per 100 pounds higher. Visible corn supply continued to mount and increased 5,447,000 bushels to 69,547,000 bushels for the week ended November 16, against 36,461,000 bushels for the same time last year, it was reported by the Chicago Board of Trade.

Corn price supports for the 1957 crop were reduced to $1.36 per bushel if the acreage allotment system remains in effect and $1.31 if farmers change to a new and easier type of planting. Farmers will vote December 11 in a referendum between the present allotment system and a less restrictive base acreage program. Price supports of $1.50 per bushel are in effect this year. Government officials stated supports were cut because heavy stocks of corn—about 4.6 billion bushels were overhanging the market.

Egg Albumin—Moderate demand was reported for prompt delivery. Flake was available at $1.69 to $1.71 per pound and powder, $1.73 to $1.75, spot depending upon quantity. The technical grade was firm and in limited supply. Demand was spotty, with prices unchanged at $1.08 to $1.10 per pound, according to quantity.

Egg Yolk—This market was steady at the recent advance. Stocks on spot were maintained at $1.07 to $1.09 per pound, spot as to quantity. Consumers absorbed fair sized lots for prompt delivery.

Potato Starch—Firm tone ruled in this market. Active demand continued for delivery against existing contracts. New business was reported moderate for prompt and later delivery. Inquiry for future needs also was keen, with some business reported at current prices for delivery during the major part of 1957. Production was full swing, with grinders operating at capacity. Carlots were well held 6¼c. per pound, f.o.b. Maine and 6c. for delivery south of Virginia. The Idaho market also was steady at 6¼c., carlots, mills and 5½c., for delivery to eastern points. Small lots demand was quite active on spot. Prices ranged from 8¼c. to 9¼c. per pound, exwarehouse, according to quantity.

Tapioca Flour—Business was reported spotty, chiefly for prompt delivery. Deliveries against contracts continued to move in good volume. Interest was confined to the Siamese grades. Medium grades were easy due to keen competition and offered from 5¼c. to 5.35c. per pound, carlots, exdock, as to quality and seller. AAA remained steady at 6½c. to 6.6c. per pound, carlots, exdock, prompt shipment. Brazilian flour was inactive and entirely nominal at 10c. to 10½c. per pound, exdock, carlots, as to seller and quantity.

Tanning Materials

Production of cattlehide and kip side leathers in September was estimated at 1,970,000 hides and kips by Tanners Council, compared with 2,224,000 in August. Calf and whole kip skins output also was lower, totaling 586,000 skins against 668,000 the previous month; goat and kid skins, 1,701,000 skins against 2,033,000 and sheep and lamb skins, 2,140,000 against 2,578,000.

Cutch — Offers continued scarce for prompt shipment as production was said to be sold up for the balance of the year. Forward positions were maintained at 8½c. per pound, exdock, plus duty.

Myrobalans—Offers for shipment were maintained at former levels. Trading was reported restricted to actual needs. Genuine J1 was held at $63 to $64 per ton, exdock, prompt shipment; crushed, $79 to $80 per ton and Bombay $61 to $62, same basis.

Quebracho Extract—Trading was spotty and restricted to fill-in needs. Primary was quotably unchanged. Solid ordinary guaranteed 63 percent tannin was quoted at 11 21/32c. per pound, exdock, plus duty and clarified 64 percent 12 23/64c., same basis.

Wattle—While business was spotty, replacements were maintained at former levels. Firmness of primary market was reflected in all grades. Fair average bark quoted at $95 to $96 per ton, exdock, prompt shipments and merchantable at $91 to $92. East African extract was unchanged at 9¾c., and South African 10c. per pound, carlots, exdock, plus duty.

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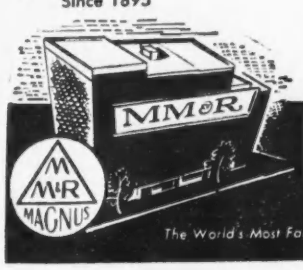

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Essential Oils, Aromatics

Nutmeg oil spiraled upward on spot last week to a $12.50 per pound level. The new listing is so high, one dealer noted, that many buyers have been driven out of the market. Immediate cause of the high quote is the tight supply situation on spot. Very little material is here and production from source was light. Long range cause of the situation was the heavy plantation damage caused by storms at source earlier in the year. Chenopodium rose 35 cents per pound to a $4.25 level on spot. The firmness of this material continues because of tight supply. Sandalwood oil also advanced in price. The current listing is $13.85 or 10 cents higher than before. Declines were noted in grapefruit and lemongrass oil. The former is a reflection of waning citrus oil prices during this post-seasonal period. Lemongrass reverted to its listing of prior to the Middle-East crisis.

Aromatic chemicals showed some little firmness on spot last week. Though there were no drastic price shifts, some materials reflected gains in position because of essential oils held-up from spot by the Suez crisis.

In the seeds and spices market, less activity than had been expected, has been noted. Dealers initially expected the world situation to bring the market up sharply. However, with the exception of a few tight materials, the markets have remained unmoving. Pepper, for example, continued relatively lethargic. The real movers in this market have been nutmegs and mace. Vanilla beans took a dive in price last week as the result of newcrop influences. Dealers claimed a relatively good demand in spite of the price drop and said that both spot and forward positions were getting part of the activity.

An English report on Dutch essential oils noted, that the newcrop position for some oils is not good. Higher prices seem to be expected for Angelica caraway oil since production is small with no carry-over stock. The early frost damage followed by cold wet summer has taken its toll, it was said. Dutch peppermint cultivation has been more satisfactory, and valerian root is expected to crop normally later in the year. It is not generally appreciated, it was said, that Holland is becoming one of the most important producers for Valerian, largely under the auspices of V.N.K.-United Netherlands Herb Co-operative.

PriceTrends

Advanced

Oil, chenopodium, 35c. per lb.
Nutmegs, $1.75 per lb.
Sandalwood, 10c. per lb.

Reduced

Oil, grapefruit, 5c. per lb.
Lemongrass, 10c. per lb.
Vanilla beans, Bourbons, 50c. per lb.
Mexican whole beans, 75c. per lb.

Comparative Price Indexes

(100 —1949 average)

Last week	Prev. week	Last month	Nov. 25, 1955
138.45	138.30	137.85	134.84

For Current Prices see Page 9

Essential Oils

Chenopodium—Dealers throughout spot noted a good position for this commodity last week. The present listing of $4.25 to $4.50 per pound is resultant of a steady advance in price for the past months. Listing for about $3.50 per pound at the beginning of October, the material has slowly but steadily advanced to its present level of strength. Further stiffening is expected, it was said. Firming originally took place prior to the beginning of distillation of newcrop, in October. At that time, there was little oldcrop about on spot. Since that time, supplies have continued tight, and the present condition has prevailed.

Lemongrass — This material, which jumped in price originally on the heels of the Suez, has dropped down to a position 10c. lighter than the original listing or $1.65 per pound. The market for lemongrass, originally soft in tone due to heavy production this year, had been declining ever since first reports reached spot of the size of the newcrop. Though the expected two to three months holdup in the traffic situation in the Mid-East may again reverse the situation in lemongrass, dealers feel that the situation is fluid enough so that a good quantity of the material would have to be blocked before such a price development should take place.

Nutmeg — Prices on this commodity continued to work higher in keeping with steadily mounting costs of the spice, dealers here reported last week. The current listing of $12.50 per pound is $1.75 higher than the week previous quote and better than $3 per pound higher than that of three weeks ago. Supplies are reportedly low with only a very limited quantity being offered on spot. With the shortage likely to grow worse, all indications point to a further rise in prices. Some houses state, however, that they have already noticed a greater degree of buyer resistance to the abnormally high price level.

The shortage and high prices stem from the severe storms in the British West Indies last year. Reports at the time noted that it will take several years to recover the former production level of the damaged areas.

Sandalwood—This oil showed a slight advance in the spot market last week, dealers here reported. The current listing, $13.85 per pound, is 10c. higher than the previous quote. Though the market has not been an overly active one recently, it has shown a relatively firm tone during the past few weeks.

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Period Ended Nov. 17

Anise Seed (2 lots), 250 bags.
Black Pepper (3 lots), 210 bags.
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Celery Seed, 175 bags.
Chillies (3 lots), 518 bags.
Cloves (4 lots), 400 bags.
Coriander Seed (4 lots), 2,075 bags.
Cumin Seed (4 lots), 1,009 bags.
Fennel Seed (2 lots), 360 bags.
Fenugreek Seed, 102 bags.
Gum Karaya (12 lots), 420 bags.
Juniper Berries, 167 bags.
Mace (5 lots), 51 bags.
Nutmegs (15 lots), 1,607 bags.
Quince Paste 100 cases.
Sage Leaves, 101 bales.
Sesame Seed, 131 bags.
Turmeric, 68 bags.

Seeds and Spices

One dealer's report of market conditions on November 15 (just prior to the longshoremen's strike) is as follows: Overshadowed by the spectacular advance of nutmeg, the pepper market remained almost stationary throughout the week. Despite a fair amount of spot offtake which included deliveries into January, neither political news nor the possibility of a renewed dock strike did anything to counteract the lethargy which has dominated the procedings for some time past. Sarawak and lampong appeared steady, while Dudia displayed occasional willingness to make minor concessions in nearby positions. The market, in short, had become adjusted to the closing of the Suez Canal and except for occasional flurries, in the wake of news items, seemed crisis proof.

Spot stocks and afloats, combined, appear to represent about 6-7 weeks supply, which is not excessive under present conditions, especially when one takes into account that a good portion of the visible supply is held in strong hands, including those of foreign shippers whose cost level is 1c. to 3c. above the present spot price. Continued interest in deliveries around 25c. to 25½c. indicates that there has been no basic change in buyer's outlook. With the spread between spot and forward positions compressed to less than 2c. and barring a worsening of the political situation, a continued stalemate is all that can be expected.

Nutmegs—Dealers here reported that prices advanced sharply on every order of importance. Neither Granada or Indonesia seemed able to offer any quantity of importance, thus buyers scrambled for the few offerings made here. Mace as well caught fire and actually appeared to be in tighter supply than nutmegs.

Paprika—The Spanish market still appears to be boiling and exporters are only limited sellers even at the higher levels. Rumors of reduced crop estimates have

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Essential Oils

been heard at spot, though no verification has been made. Yugoslavian and Chilean paprika are attracting a broader interest.

Pepper—The market for this commodity seemed confused and confounded during the past two weeks, a dealer here reported. While remaining somewhat sensitive to developments on the international scene, it lacked sufficient day to day demand to display any particular strength on spot. Despite the proximity of new-crop Malabar, India does not display any great willingness to discount the market to force business in futures. Interest here broadened in deliveries during the first quarter and half of next year but sellers could only be found at small discounts under spot levels. About the only conclusion to be drawn from the action this week is that the approach of India's newcrop shipping season has restrained the market from reflecting the trouble in the Middle-East.

Vanilla Beans—This commodity is lower due to new crop influences. There has been some slight activity over the past days but this has not affected the current trend or price level.

Sales of new crop bourbon beans are currently being made on the basis of $6.50 to $6.75 per pound for May-June with spot lots commanding a premium of $1 per pound.

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Petrochemicals Picture Seen Affected

—Continued from page 3

tal"—banks, insurance companies and the like—might be induced to lend money to needy and promising students at what he described as "a fair rate of interest over a reasonable term."

"Under appropriate conditions," he added, "industry might be helpful in the selection of applicants through the personal contacts of its people. Assuming substantial nationwide industry participation, the administrative costs would be small."

Such a program, the US Steel head said, would not be limited to science scholars.

The chemical industry was warned that "there are forces at work in Washington which need to be counter-balanced." The danger signal was flashed by George A. Fowles, a former director of the chemical and rubber division in the Business and Defense Services Administration.

Mr. Fowles, who is manager of plastic materials sales for B. F. Goodrich Chemical Company, Cleveland, Ohio, referred to economic studies by trade unions.

"They [unions] have dozens of researchers compiling factual data on all sorts of questions," he said, "and their data is used to influence the outcome of legislation on many subjects.

"Business and industry cannot afford to ignore this situation, in my judgment. We need to keep ourselves fully informed about activities of this kind, and we need to see to it that government departments are not left wtih one-sided points of view on the matters they are considering."

More or less seconding this view was Sen. Roman L. Hruska of Nebraska, who said that business groups can be of service to congress by giving accurate factual information as to how new laws would affect business.

He made it clear, however, that when he spoke approvingly of lobbying he was not talking about improper efforts to influence the lawmakers.

Parker Friselle, manager of market research for Dow Chemical Company, Midland, Mich., explained how his firm had taken "Saran Wrap"—in 1941 a "heavy, slightly yellow, oily film that smelled bad"—and converted it into a clear, non-oily, odorless household wrap with sales in 1955 of 47 million rolls.

Today, Mr. Friselle revealed, Dow has more than 12 percent of the national wrapping material market just three years after entering the field.

Public relations as practiced by American industry is playing an increasingly important role in removing road blocks of opposition, prejudice and misunderstanding among American Buyers, Ralph Winslow told MCA.

Mr. Winslow, who is vice-president and manager of the marketing department of Koppers Company, Pittsburgh, Pa., said that "by creating greater understanding among a lot of people whom salesmen never see, public relations efforts give personal salesmanship, advertising and sales promotion a much greater probability of paying off at the box office."

Chamber of Commerce Rules On Federal Atomic Insurance

New policy supporting federal indemnification of commercial atomic plants for accident liability beyond amounts covered by private insurance has been announced by the Chamber of Commerce of the United States.

The chamber said its new policy recognizes that the need for federal indemnification of private atomic installations for third-party liability is a major road-block to swift development of peacetime atomic projects.

Private insurance, now totaling $60 million, is believed inadequate by prospective operators of nuclear reactors, the chamber pointed out, even though the possibility of an atomic accident is remote.

For this reason, the chamber said, federal indemnification would not constitute competition with private insurance.

Copra Philippine Exports Off 20 Percent in October

Philippine exports of copra in October declined almost one-fifth from the previous month, while coconut oil exports increased 90 percent, according to the Foreign Agricultural Service. Prices in mid-October remained essentially the same as a month earlier.

Combined exports of copra and coconut oil in October, equivalent in terms of copra to 110,148 long tons, reflected a decrease of 10 percent from a month earlier (when the volume was the largest since the 113,764 tons exported in March 1947) and a gain of 7 percent from October 1955.

Cumulative shipments of copra and coconut oil in the January-October period totaled 951,738 tons copra equivalent, one-fourth more than the 755,006 tons in the corresponding period of 1955.

Copra exports during October, totaling 90,642 tons, again—as in recent months—went predominantly to Europe. By destinations and quantity, they were as follows:—United States—32,727 tons (Pacific Coast—30,727, Atlantic Coast—2,000); Canada—1,500; Belgium—500; Denmark—1,250; Germany—4,500; Netherlands—18,600; Italy—1,100; Spain—750; Sweden—7,000; Europe unspecified—8,165; Palestine—3,500; Colombia—7,950; Venezuela—2,600; Chile—500.

January-October copra exports at 815,297 tons were up 24 percent from the 659,012 tons exported in the comparable period of 1955.

Coconut oil exports in October, totalling 12,289 tons, were as follows:—United States—10,249 (Atlantic coast only); Cuba—350; Europe unspecified—1,690.

Textile Chemists Elect President, Regional Heads

The American Association of Textile Chemists and Colorists has elected George O. Linberg as its new president, succeeding Raymond W. Jacoby.

Four regional vice-presidents were also elected by the group:—Weldon G. Helmus, Ernest R. Kaswell, H. Gillespie Smith, and Elliott Morrill.

MIXERS—1 & 30 cu. ft. double cone; 5 & 9 cu. ft. Lancaster EBG 3, EAG 3 & 4.

KETTLES—1 gal. s/s 1000 psi, 65 gal s/s, 250 gal. Aluminum—all jacketed.

PEBBLE MILL—Lab 15 gal. Jar 18x18; 24x24, 24x36, 30x24, 36x48, 4'x5', 5'x6', 6'x8' — porc. linings. 24 x 18 Rubber Lined.

HAMMER MILLS — #2SI Mikro, 24" Mikro Sawtooth Robinson #9.

FURNACE — U. S. Rotary Smelting, gas fired.

SCREENS—Tyler, 3x5 & 3x10 Double Hummer; 5x12 Double Robins.

BALL MILLS—Hardinge 6'x22", w/New Lining, 7'x48" Pebble—5'x21' tube

CRUSHERS—JAW—6x12 Cedar Rapids, 20x4 Farrel, 14x29 Acme, 15x24 Traylor.

ROTARY DRYERS—12"x22', 3'x20', 39"x21', 44"x25', 5'x40', 6x40.

BRIQUETTING MACHINE — Komarek Greaves—16"x10" w/mixer & drive.

FORK TRUCK — 2000# Hyster gas pneumatics.

FILTER PRESSES—Shriver 7" Lead w/Lead Diaphragm Pump & 12"x12" p&f. C.I.

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BIRD CONTINUOUS CENTRIFUGE
18" x 28" S.S. 317

BLENDER, Ribbon Reed 2000 lb. cap. 15 hp
CENTRIFUGE, Suspended 26" all S.S. 15 hp. 4 Speed Motor, Complete Tolhurst
FARRELL Lab Mill 2 Roll 6"x12" XP Motor.
FILTER Sweetland #2, All S.S. Top Drainage
FILTER, Niagara 35-20, Vert. S.S. Leaves
FLAKER New Buflovak 6" Dx8" Face Comp.

MIXERS-(2) J. H. DAY Heavy Duty 12 Gal D. A. SIGMA, Jack Geared Both Sides

SPERRY 18" x 18" Filter Press 4 eye wash, 12 Chambers

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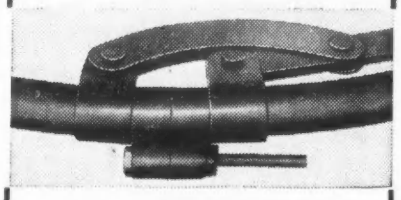

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Stokes 2'x6' Rotary Vac. Dryer
1—Allbr. Nell 4x9 Atmos Drum Dryers.
1—Buffalo Vac. Drum Dryer, 24"x20"

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4—Tolhurst 40" Suspended Type.
8—Centrifugals, 12" 20", 26", 30" 40" & 48" Steel, Copper, Stainless & Rubber.
6—Sharples No. 5A Stainless & #6.
2—De Laval Multi Clarifiers 300 & 301.

FILTERS
#2 Sweetland Filter 12 Stainless covered leaves
1—Vallez Filter #49 with 41 Stainless covered 44½" dia. leaves.
Gen. Amer. 2'x1' Rotary Vac. Filter.
Sperry and Shriver 6" to 36" iron & wood.
Sweetland & Oliver Filters.

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Pfaudler 200 gal. Glass Lined Jack Kettle.
Dopp 350 gal. Agit. Jack Cl Vac Kettle.
2—Impreg. Units 30" & 36" dia. complete.
6—Jack. steel Kettles to 1000 gals.
2300 gal. vert. agit. Jack. Steel Kettle.
1—250 gal. Lead lined Kettle.
Stainless, alum., copper. Glass lined, lead lined and steel kettles and tanks.

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2—Mikro Pulverizers #2TH & #2SI.
Pebble Mills 24"x30", 30"x30", 30"x34", 30"x42", 4'x5'. Also jar mills.
#1 Raymond Autom. Pulverizer, 20 HP.
1—#00 Raymond Mill, 30 HP complete.
2—#0000 Raymond Mills.
Sturtevant #00 Swing Sledge Mill, 3 HP.
Schutz-O'Neill #1 & 20" Pulverizers.
Williams #3 & 2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll crusher
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S. & Premier 1½ H.P. Colloid Mills.

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4' Steel Cone Blender, 5 HP.
Day Imperial 75 & 150 gal. Jack. Mixers.
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Kent 3 HP. continuous dry mixer.
Baker Perkins double arm Mixers, 100 & 50 gals. Also single arm Mixers.
Blystone 3000# horiz. spiral mixer.
Day Brighton 20 gal. Change Can Mixers.
Read 50 & 100 gal. double arm mixers.
Read 80 qt. vert. mixer, 3 speed.
Tyler 3'x5' Vibratory 2 deck Screen.
10—Dry Powder Mixers, 50 to 3,000#.
3—Day 8, 15 & 40 gal. Pony Mixers.
15—Portable Elec. Mixers, ¼ to 3 HP.
6—Lead and Paste Mixers to 150 gals.

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Stokes & Kux 2½" dia. single punch Preform Machines. Also other sizes & Rotaries.
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1—Buflovak 6'x5'6" Monel single drum Flaker.
4—Stokes single door Vacuum Shelf with 8—44"x40" shelves.
3—Devine double door Vacuum Shelf 17 and 20—59"x78" shelves.
3—Stokes Rotary Vac 4'x20', 30"x8', 18"x42".
1—Devine Rotating Vacuum 5'x10'.
2—Louisville Rotary Steam Tube 38"x25', 6'x40'.
3—Rotary Dryers 4½'x50', 6'x40', 6'x60'.

MIXERS
2—Baker Perkins 100 and 50 gal., 316 S.S.. Sigma Blades.
2—Day "Imperial" double arm 75 gals., power tilt.
5—Day "Cincinnatus" double arm 250 and 100 gals.
5—Steel jacketed Powder 50, 225 and 350 cu. ft.
1—Struthers-Wells 6'x9', 304 S.S. Rotating, jacketed.
1—Robinson 48"x7'6" long, 304 S.S. jacketed Powder, 90 cu. ft.
1—4' dia., 304 S.S. Conical Blender, 3 HP motor.

MILLS
1—Patterson NEW 6'x8' Porcelain lined Mill 50 HP motor.
3—Abbe Paterson 6'x8' unlined Ball Mills.
3—Abbe 5'x6', 4'x5', 3'x3½' Silex lined Pebble Mills.
3—Mikro Pulverizer Bantam and #2TH.
1—National 6"x12" Two-Roll Mill, motor driven.
7—Jeffrey Hammermills 20"x12", 15"x8", motor driven, NEW.

CENTRIFUGES
2—Sharples C-27, C-20 Super-D-Hydrators 316 S.S.
1—Sharples PY-14 Super-D-Canter, 304 S.S.
5—Bird 32"x50", 316 S.S. solid bowl, continuous, fume tight, 60 HP TEFC motors, New 1953.
2—Bird 18"x28", 24"x38" Stainless Steel, Continuous, Solid Bowl.
2—Tolhurst 40" Suspended Steel Perforated 15 HP XP motors.
1—Bird 40" Suspended rubber covered, imperforate basket.
2—Bird 40" Suspended 347 S.S. perforated basket, TEFC motor.
1—AT&M 36" center-slung, rubber covered, perforated basket.
1—Fletcher 30" center slung 304 S.S., Perforated basket.

KETTLES, REACTORS, CONDENSERS, EVAPORATORS, TANKS
2—500 gal. 347 S.S. jacketed, agitated Reactors 300# int. pressure, 75# jacket pressure.
1—600 gal. 316 S.S. jacketed, agitated Reactor 165# int. pressure.
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6—500 gal. 316 S.S. closed, jacketed Tanks.
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3—Unused 2500 gal. Vertical rubber lined Tanks 7'x9'.
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10—Kellogg Admiralty Tubes 2700, 2200 and 1800 sq. ft.
2—Struthers-Wells 536 sq. ft. Heat Exchangers 304 S.S.
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FILTERS
1—Oliver 8'x10' Monel Rotary Vacuum.
1—Eimco 18"x12", 316 S.S. Rotary Vacuum.
2—Feinc 3'x1', 316 S.S. Rotary Vacuum with vacuum and receiving Tanks.
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1—Oliver 5'3"x8' Steel Rotary Vacuum, totally enclosed.
1—Niagara 230-32 Pressure Filter, 230 sq. ft., 304 S.S.
2—#3 Sweetland Filters 304 S.S., 12-25" dia. leaves. 75 sq. ft.
2—#12 Sweetland Filters 36 leaves, 4" centers, 500 sq. ft.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing.

MISCELLANEOUS
4—Orville Simpson Rotex Sifters 60"x120", 40"x84".
6—Robinson, Sprout Waldron, 304 S.S. Sifter, 40"x84" single deck.
7—Stokes DD2, DS3, B2, "R" and "F" Tablet Presses.
1—Stokes #21J, 304 S.S. Granulating Mixer, NEW.
10—Nash Vacuum Pumps H7, H6, H5, L5, L4, TS7, #4, #2, AL-572.
2—Stokes #412G, 412B Vacuum Pumps, motor driven.
15—Chlorimet, Durimet and Duriron Centrifugal Pumps 1½" to 5".

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1—2500 gal. Horizontal Oval Stainless Steel Closed Tank.

1—2000 gal. Horizontal Oval Stainless Steel Closed Tank.

1—350 gal. Vertical Stainless Jacketed Tank with Agitator.

4—500 gal. Pfaudler Stainless Steel Jacketed and Agitated "Super-Mixer" Tanks.

1—Horizontal Autoclave Tank, 35# int. pr., 36" diameter x 36" long, with Q.O. door.

3—A. L. Anderson Vacuum Drying System, made of Stainless Steel (2—Type 316; 1—Type 304). Has (6) Stainless Steel shelves approximately 3' x 6' with individual doors and vacuum connections for each shelf; with vacuum pump and motors.

2—DeLaval Model BUH-3930 Hermetic Clarifiers (Separators) Serial Nos. 3519628, 29 (with 3 HP motors). St. St. bowls.

1—Carter & Nansen design Copper Bubble Cap Alcohol Still 36" diameter x 35 plates, with preheater and condenser. (To produce 200 gallons of 95% by vol. alcohol from aqueous feed containing 50% alcohol.)

1—Stainless Steel Packed type Distillation Tower, 24" diameter x 27' 9" O.A.H. x 1/8" T304 St. St. (60 gallons/hour).

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5—Alsop WF-1 "Hy-Speed" Brass Water Filters appr. 15 GPM.

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1"—approx. 400 ft.
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Chemical Plant Equipment

1—600 gal. T317 St. St. Tank, ¼", ASME 15# Pr.
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1—170 gal. T316 St. St. Tank, ¼" & ½", ASME 15# Pr.
1—135 sq. ft. Heat Exchanger T316 St. St., ASME 50# Pr.
2—Hills-McCanna K3M-2F Two Feed Metering Pumps, 3" x 3" and 5" x 3".
2—Lawrence T316 St. St. Sump Pumps, 5" x 4", 200 GPM.
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1—Blaw-Knox K-15-600 Gas Cleaner, ASME 600# Pr.
1—Ozark-Mahoning Submerged Combustion Evaporator, 2,800.00 BTU/hr., type 316 St. St., with 1150 gal. T316 Evaporator Tank, 26" dia. x 62' T316 Stack, Air Blower and Gas Pump with motors, T316 Burners, controls, etc.

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C20 Sharples Super-D-Hydrator SS.
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40" SS Bird Sus. Perf. Centrifuge.
48" Bird SS Centrifuge, perforated.
200 gal. Wet Churn, jktd., Vac. 20 HP.
Rotoclone Collector Size 36, Type W.
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5' x 10-Hearth Herreshoff Furnace.
243D Stokes Oscill. Granulator.
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140 cu. ft. Paddle Mixer (NEW).
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412G Stokes Microvac Pump (NEW).
212B Stokes Vacuum Pump.
2000 gal. Reactor, 200 PSI.
18" Gayco Cent. Separators.
28A Robinson Gyro Sifter, SS.
1300 gal. Glass-Lined Tank.
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Air Conditioners: Surface Combustion Kathabar Dehumidifiers, Size 500 B.L.T. & 250 B.L.T.

Reactors—Kettles: 8—Pfaudler 50 to 350 gal. Glass Lined Jacketed Agitated Reactors; 60 & 150 gal. Glass Lined Vacuum Receivers; 200 gal. Monel Jacketed Agitated Reactor; 15—25 to 200 gal. Stainless Steel Jacketed Kettles; 2—400 & 300 Stainless Steel Stills, full vacuum; 400 gal. Lasti-Glass Lined Jacketed Kettle; 5—2'x12' Lasti-Glass Lined Absorption Columns; 750 gal. Steel Closed Jacketed Kettle; 21—500 gal. Harris Steel Closed Jacketed Kettles.

Centrifugals: 40" Bird, solid steel basket, 30/7½ HP motor; 7—Model 6900 & 6080 Stainless Steel Podbielniaks with 5 & 7½ HP motors; Model 6110 Podbielniak SS Laboratory with 2 HP motor.

Dryers: 5—Stokes Vacuum Shelf Dryers with 44"x40" Steam Heated Shelves; 1—Stokes Laboratory Vacuum 2 Shelf Dryer; 2—Precision Stainless Steel 2 Truck Dryers electrically heated; 4—National Research Model V-10-D Vacuum Diffusion Units.

Condensers: 5—Ansonia & Vulcan, 60 to 200 sq. ft. Stainless Steel; Cyclops Pipe Cooler; 3—Elliott & Ingersoll-Rand Three-Stage Steam Ejectors.

Also: Filter Presses; Vial & Bottle Washers; Jones Cartoning Machines; Conveyors; Trucks; 25—Glass Lined, Rubber Lined & Steel Tanks, 535 to 20,000 Gal.; 20—Vacuum Pumps, 15 to 300 cfm; 45—Stainless Steel Centrifugal Pumps—5 to 100 gpm; 80—Steel Centrifugal Pumps—5 to 750 gpm; Laboratory Equipment and fixtures; Recorders & Controllers; Fans; Blowers; Agitators; Electric Motors; Scales Speed Reducers Cabinets; Shelving; Benches; Fittings & many other items too numerous to mention.

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7—Aluminum Storage Tanks, 12,000 and 17,000 gallons.

1—Stainless Steel Vertical Tank, 3300 gallons.

1—Downington Type 304 Stainless Steel Jacketed Reactor, 1000 gallons, ASME (New).

3—Stainless Steel Storage Tanks, 6000 gallons each.

1—H. K. Porter Stainless Steel Jacketed Reactor, 600 gal.

1—Struthers Wells Type 347 Stainless Steel Autoclave, 1000 gallons, 2000 PSI.

1—7000 gallon Propane Tank.

1—Downington Steel Jacketed Vacuum Kettle, 2000 gals., ASME.

6—Patterson Steel Jacketed Kettles, 2500 gallons, ASME.

2—Alsop Type 316 Stainless Steel Filters, Size SD 12 WR-20.

1—Oliver Rotary Vacuum Filter, rubber-lined, 3' x 6'.

1—Bird Continuous Centrifugal Filter, 24" x 38".

1—Baker Perkins Type 316 Stainless Steel Multimatic Continuous Centrifugal Filter, HS-24".

12—Sweetland #12 Filters with 72 Stainless Steel Leaves.

1—Stokes Model R Tablet Machine with 3 HP Variable Speed Drive.

1—Stainless Steel Jacketed Reactor, 2000 gallons, ASME.

1—Vulcan 18" x 25' Steel Bubble Cap Column, ASME (New) with 17 trays.

1—Vulcan Steel Bubble Cap Column, 24" x 30', with 20 trays, ASME (New).

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1—Sparkler Type 316 Stainless Steel Filter, Model 1856.

1—Sparkler Monel Filter, Model 1858.

1—Sperry Type 316 Stainless Steel Plate and Frame Filter Press 18" x 18", 21 chambers, 4-eye closed delivery.

2—Alco Admiralty Metal Heat Exchanger, 1500 sq. ft. ea.

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18—Struthers Wells Steel Heat Exchangers, 150 sq. ft. each.

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1—Oliver Type 304 Stainless Steel Continuous Filter, 3' x 6' (New).

1—Link Belt Roto Louvre Dryer, Model 310-16.

1—Link Belt Stainless Steel Roto Louvre Dryer, Model #207-14.

1—Link Belt Roto Louvre Dryer, Model #502-20.

1—Link Belt Roto Louvre Dryer, Model 1106-36.

2—Rotary Kilns, 7'6" x 60'.

1—Sparkler Type 316 Stainless Steel Filter, Model 33S17.

1—Hardinge Rotary Dryer, 7'6" x 55'.

1—Stokes Double Drum Dryer, 5' x 12'.

3—Ames 500 HP Steam Generators, 125 PSI, ASME, 1953.

1—Foster Wheeler Dowtherm Unit, 600,000 BTU.

4—Tolhurst 30" Suspended Type Centrifuges with Imperforated Baskets.

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NEW AND GOOD-AS-NEW EQUIPMENT

1—Stainless Tank #430 Chrome, vert. 7'x10' deep.
20—Jacketed Kettles—Stainless, Copper, Aluminum.
1—Day Mixer, steam jacketed, 50 gal. Sigma Blade.
1—Copper Evaporator, steam jacketed, 9'1"x3'9".
60—New Pressure Cookers, 18"x18" & 24"x28".
1—New Glass Nash Centrifugal Pump, 160 gpm.
1—New Nash Vacuum Pump Type AL-572.
1—Buflovak Jacketed Impregnating Tank 42"x52".
1—Stedman Disintegrator size 40-6.
1—Abbe Ball Mill, 36"x42" Buhrstone lined.
#316 Stainless Steel Tanks, new 100, 200 & 360 gal.
1—Nash Air Compressor, Type AL-623.
1—Manton Gaulin Stainless Homogenizer, 125 gph.
1—I&R Vacuum Pump, 5 H.P., 60'.
4—Heat Exchangers, 12" dia. 11' lg., 43 steel tubes.
1—Stokes Single Punch Tablet Machine.
1—Raymond 8" Hammer Mill, like new.
2—Louisville Steam Tube Dryers 6'x35'.
1—New Louisville Continuous Filtering Machine.
2—Stainless Steel Steam Jacketed Readco Mixers.
1—#316 Stainless Reactor, 265 gals. cap., jacketed.
Abbe Pebble & Tube Mill, 5'x22'—Buhrstone Lined.
1—Patterson Ball Mill, porcelain lined, 17"x27".
1—Patterson Ball Mill, 42x36, jacketed.
2—Large Steam Jacketed Horizontal Mixers.
2—Ribbon Type Mixers, 50 & 90 cu. ft.—like new.
4—Steel Tanks 90,000 gals. ea. vert. welded const.
2—Crystallizers—10' long.
3—3,000 gal. Jacketed Kettles with Turbo Agitators.
1—#10 Day 300 gal. jacketed Sigma Blade Mixer.
4—New Heat Exc. 60' with Cupro Nickel Tubes.
1—Sparkler Stainless Filter Model 33-S-9.
3—2500 gal. Pfaudler G/L Tanks & S/S Agitators.
1—150 gal. Steam Jacketed closed Tank 200# A.S.M.E.
1—Carver Laboratory Press.

H. LOEB & SON :-: 4643 LANCASTER AVE., PHILADELPHIA 31, PA.

ECH SPECIALS

3'x5' Single Drum Dryer, 316 SS, 5 HP Exp. mtr.
2 Heavy Duty W & P Jktd. Mixers, 15 gal. 15 HP
BP 100 gal. SS Sigma Arm Mixer, 20 HP exp.
Link Belt SS Rotary Dryer 5'x20', complete
Gen. American 42"x120" Twin Drum Dryer
Artisan Metal Prods. SS Evap. 1 Effect
70 cu. ft. Ribbon Blender with 20 HP Motor
Nash Hytor Vac. Pump, 6 with 40 HP Motor
Pfaudler 50 gal. Reactor, glass perfect

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FMC

USE YOUR SURPLUS and IDLE EQUIPMENT as CASH TO BUY REPLACEMENT FACILITIES

Pfaudler Glass Lined Reactors 500 gal., 1000 gal., other sizes.

Blaw Knox Stainless Reactors; Welded, Jtd., Agitated; 7'6" x 7'6".

Monel Jacketed, Agitated Reactor; 785 gal. cap.; 5'x5'.

Lancatser Stainless Lined Rotary Reactor; 300 PSI; 50"x17'4".

Mojonnier Stainless Vac. Pan; 3'x10'.

Two S.S. 5000 gal. Closed Mix Tanks; Hvy. Gauge Dished Heads: 10'x9'6".

2600 gal. Steel Pressure Vessel; Jacketed, Agitated; 8'x7'.

Dopp 650 gal. C. I. Jktd. Agtd. Kettle.

Nickel Clad Jacketed Agitated Vessels; 7'x11' and 2'x6'9".

FRED R. FIRSTENBERG, *Pres.*

FIRST MACHINERY CORP.
209-289 TENTH ST.
BROOKLYN 15, N. Y.
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YOU CAN SAVE $ $ $

3—Stainless type 316, 7000 & 1200 gal. open top vertical tanks.
1—Unused stainless 304—1000 gal. jkd. and agtd. reactor—5HPXp.
2—Stainless 316 heat exchangers 200 sq. ft. area.
3—Unused Simpson #0 Intensive mixers 5 HP—TEFC.
2—Stokes tablet presses model R and model T.
6—Kux model 61 tablet presses.
10—Philadelphia agitators—5 HP—35RPM w/steel shaft 8'x3".
2—Day 2000 & 1000# dry powder mixers one jacketed.
3—Aluminum 3500 gal. vertical closed tanks.
1—Stainless 304 tank 3300 gal. horizontal.
3—Colton model 17TF stainless tube fillers, closers and crimpers.
4—Devine 14 & 10 shelf vac. shelf dryers.
1—Patterson 8'x10' burrstone lined tube mill, 100 HP.
6—Day 75 gal. jacketed sigma bladed double arm mixer.
6—Hersey 4'x25' and 6'x27' SS & Monel rotary dryers.

LIQUIDATING

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CHOICE ITEMS

1—Day Stainless Steel Double Arm Sigma Blade Mixer, 350 gals.
1—W & P Mixer 100 gal. jacketed, double arm.
2—Stokes Model "R" Tablet Machines, variable speed drive w 3 H.P. motors.
2—Stokes "BB-2" Rotary Tablet Machines.
1—Stokes "DD-2" Rotary Tablet Machine.
2—Devine #28 Double Door Vacuum Shelf Dryers.
2—#12 Sweetland Filters, 36 monel leaves on 4" centers.
1—Steel jack. agitated Kettle 800 gals.
1—Steel jack. Kettle 1000 gals.
3—Day & Ross 15-50 gal. Pony Mixers.
2—Fletcher 48" S.S. Extractors.
1—Inconel Heat Exchanger 195 sq. ft.
1—Day 5 x 12 Lab. Roller Mill.
1—Allbright Nell 4' x 9' Double Drum Dryer.
2—Patterson 4' x 5' and 5' x 6' Pebble Mills.
5—Rotex Screens 20" x 48" to 40" x 84".

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Business Wants and Offers

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BUSINESS OPPORTUNITIES

Opportunity! Prosperous paint, lacquer and stain business housed in 8500 square feet fire proof building. Complete equipment. Will sell or lease in entirety. W. E. Bushong, 300 Indiana Trust Bldg., Indianapolis, Indiana.

Chemical Sales agent—Philadelphia area—Established. "technical-service-conscious" agent desires additional representation from basic manufacturer. Excellent sales and chemical background. Reply OPD 196.

EQUIPMENT OFFERED

Stanless Tanks—ten 525-gallon each stainless mixing tanks, 56" diameter by 48" high with ¾ HP 60 cycle 3 phase AC motor. Like new. Immediate delivery. OPD 193.

Sulfinator—Pfaudler type p 50-gallon glass-lined sulfinator, Model 805. Like new, immediate delivery, price 50% of new, F.O.B. western New York shipping point. OPD 193.

Air Compressor—9" x 8" twin cylinder air compressor, capacity 200 CFM at 350 RPM with 40 HP 220 440 volt 3 phase AC motor, complete with all automatic controls. Factory rebuilt. Immediate delivery. OPD 200.

Glass-Lined Tanks—We can offer some surplus tanks that we have available including ten one-piece glass-enamel lined tanks measuring 9' diameter by approximately 10' 6" high, capacity 4100 gallon each with stands and manholes at a very attractive price F.O.B. truck shipping point. One or more tanks can be purchased at one time. Complete details by writing. OPD 201.

For Sale: 93 sq. ft. S.S. T304 Heat Exchanger ASME; 110 gal. Robinson S.S. unique semi-mass mixer jacketed ASME; 75 gal. S.S. jacketed Day double sigma blade Mixers; 700 gal. S.S. T304 sanitary Tanks; 24" x 36", 42" x 90", 42" x 100", double drum Dryers; S.S. T304 sanitary double effect Evaporator, 1025 sq. ft. Best Equipment Company, 617 Davis Street, Evanston, Illinois. DAvis 8-0926.

EQUIPMENT OFFERED

Dust Collector—Niagara #35, 1080 sq. ft. of cloth, rotary automatic. Bargain $350.00 FOB Jersey City. Phone DElaware 2-6970 or write OPD 188.

FACILITIES OFFERED

We Have facilities in Philadelphia available for liquid blending and compounding in lots up to tank car capacity. Three 8500 gallon heated storage tanks included among other facilities. Mechanical and air agitation. Railroad siding. Dry storage. OPD 193.

FOR RENT

Newark, N.J., 16,500 sq. ft. desirable industrial property. One and two story brick buildings—sprinklered. High pressure steam. C.R.R.N.J. siding. Excellent for Chemical manufacturing. 1 minute from Pulaski Skyway and Jersey Turnpike. Principals only. OPD 178.

POSITIONS OFFERED

Progressive New Jersey chemical manufacturer seeks salesman for selling industrial chemicals in eastern area. Splendid opportunity to advance. Write resume of experience, age and salary dsired to OPD 197. Replies confidential.

Graduate Pharmacist or chemist experienced in all phases of pharmaceutical manufacturing. Indiana. Small plant operation offers immediate opportunity. Write fully—education, experience and salary desired. OPD 177.

REPRESENTATION OFFERED

Sales & Distribution wanted nationally for descaling, corrosion prevention boiler & refrigeration items selling to maintenance industrially. OPD 195.

IN STOCK

CAPPERS — CENTRIFUGALS — CONDENSERS — DRYERS — EVAPORATORS — FILLERS — FILTERS — FILTER PRESSES — GRINDERS — KETTLES — LABELERS — MILLS — MIXERS — PUMPS — SCREENS — CASE GLUERS — TABLET PRESSES — TANKS — ETC.

WRITE US OR CALL
SEELEY 8-1431

Send us your list of idle machines.

LOEB EQUIPMENT SUPPLY CO.
814 W. Superior St. Chicago 22, Ill.

SAVE WITH CONSOLIDATED

2—#12 Sweetland Filters, on 2" and 4" c.c., with monel covered leaves. Also, bronze leaves for #12, 24 steel rim, 12 monel rim, unused; 48 slightly used.
1—#2, 23 copper leaves, 1½" c.c.
2—Day 15 gal. Pony Mixers, m.d. S.S. cans.
2—Stainless Steel Hersey Rotary Dryers, 5'x26' and 6'x23'.
2—8'x125' Rotary Kilns.
1—#5057 Raymond High Side Roller Mill.
1—Day #30 Imperial Jack. Mixer, 75 gal.
9—Sperry 18"x18" Filter Presses, 11 ch.

Our 39th Year
CONSOLIDATED PRODUCTS CO., INC.
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RAW MATERIALS
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Steel, vertical, open head; can be in poor condition.
Minimum capacity 10,000 gal. MUST BE CHEAP!
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SURPLUS CHEMICALS

SOLVENTS WAXES OILS
RESINS DRUGS ETC.

WIRE OR PHONE
FOR IMMEDIATE ACTION

All offers held in strictest confidence

Barclay CHEMICAL COMPANY, Inc.
77 VARICK STREET NEW YORK 13 N.Y. • WO 4-5120

Current Market Quotations

—Continued from page 33

Wax, spermaceti, blocks, cs	lb.	.30	.33
cakes cs	lb.	.31	.34
Sugar cane, dom., refd., slabs, 80 lbs ctns., works	lb.	.65	.75
spot	lb.	.67¼	.72¼
White lead (see Lead White).			
White pine bark, rossed bls	lb.	.18	.19
White precipitate, USP powd. dms.,	lb.	6.55	—
Whiting (see Calcium carbonate)			
Wild cherry bark, thin, nat., bls	lb.	.20	—
rossed, bls	lb.	.21	—
Witch hazel bark, bls	lb.	.16	.17
leaves, bls	lb.	.27	—
Wollastonite fine bgs., c.l., works	ton	39.50	—
l.c.l. ex whse	ton	56.00	—
medium bgs., c.l., works	ton	27.00	—
l.c.l. ex whse	ton	44.00	—
Woolfat, crude (see Degras), USP (see Lanolin)			
Wormseed American bgs.	lb.	.20	.25
Levant, bgs	lb.	4.25	4.50
45°-47°C., dms. c.l. same basis			

X

Xylene (see Xylol)			
Xylenol cryst. 58°-60°C., m.p., dms.,			
l.c.l., works	lb.	.40	—
56°-58°C., dms. l.c.l., works, frt. equald	lb.	.30	—
	lb.	.212	—
l.c.l. same basis	lb.	.215	—
tanks, same basis	lb.	.199	—
fraction, b.r., 7°-9°C., dry above 227°C., dms., c.l., same basis	gal.	.96	—
l.c.l. same basis	gal.	.99	—
tanks same basis	gal.	.85	—
dry at or below 227°C., dms., c.l., same basis	gal.	1.11	—
l.c.l. same basis	gal.	1.14	—
tanks, same basis	gal.	1.00	—
Xylidines, mixed, o-m-p, dms., c.l. or t.l., works	lb.	.39	—
l.c.l. same basis	lb	40	—
tanks, same basis	lb	38	—
Xylol, coaltar, indust., tanks, works:—			
Bethlehem Pa	gal.	.34	—
Birmingham dist.	gal.	.32	—
Chicago dist	gal.	.35	—
Cleveland dist	gal.	.34½	—
Geneva, Utah	gal.	.27	—
Johnstown, Pa.	gal.	.33	—
Lackawanna N. Y.	gal.	.35	—
Lone Star Tex	gal.	.33	—
Lorain, Ohio	gal.	.33	—
Middletown, Ohio	gal.	.34	—
Minnequa, Colo	gal.	.34	—
Philadelphia dist	gal.	.34	—
Pittsburgh dist	gal.	.32	—
Sparrows Point, Md	gal.	.34	—
Terre Haute Ind	gal.	.35	—
Youngstown, Ohio	gal.	.32½	—
petroleum, indust., tanks, works:—			
Bayonne, N. J.	gal.	.34	—
Baytown Tex.	gal.	.33	—
Chicago, Ill	gal.	.35	—
Houston, Tex	gal.	.33	—
Philadelphia, Pa.	gal.	.34	—
Providence, R. I.	gal.	.35	—
Wood River, Ill.	gal.	.35	—

Y

Yara, yara, cns.	lb.	2.15	2.65
Yeast, brewer's, dry, USP, 50 int'l B units per gram, 100-lb. dms	lb.	.47	—
90 int'l B units per gram, 100-lb. dms	lb.	.52	—
200 int'l B units per gram, 100-lb. dms	lb.	.56	—
300 int'l B units per gram, 100-lb. dms	lb.	.60	—
debittered, USP, Saccharomyces, dlvd	lb.	.27	—
Torula, USP dlvd	lb.	.18	—
Yellow, barium chromate, CP, bbls., dlvd, N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul	lb.	.35	—
Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below.			
Benzidine, AAA, bbls., dlvd	lb.	2.10	—
AAOT bbls., dlvd	lb	2.85	—
Lightfast bbls. dlvd	lb	3.15	—
Cadmium, CP, all shades, bbls., frt. alld E. of Rockies	lb.	2.85	—
Selenide lithopone, all shades, bbls., frt. alld. E. of Rockies	lb.	1.05	—
Cadmium yellows, Los Angeles and San Francisco, ex whse., 1c per lb higher.			
Chrome, CP, bbls., dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island	lb.	.33	.33½
Dlvd. Ala., Fla., Ga. La. (Shreveport 1½ higher); Miss., N. C., S. C., Penna., Dallas, Tex. 1¼c. higher; Ft. Worth, Tex 1½c. higher; El Paso Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha St. Joseph 1.6c. higher; dlvd Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.			
Hansa, 10 g. bbls., same basis as yellow, chrome	lb.	2.25	—
G pigment bbls	lb.	1.91	—
Iron oxide, natural, French type, bgs., c.l., works	lb.	.06	—
Peruvian type bgs., l.c.l	lb.	.0205	.0345
pure, bgs., c.l., works	lb.	.11½	—
l.c.l., works	lb.	.11¾	—
Mercury, oxide, bbls., 1,000-lb. lots.	lb.	5.58	—
smaller lots	lb	5.60	—
Ocher (see Yellow, iron oxide, natural).			
Zinc (chromate), bbls., dlvd	lb.	.27	.27½
basic, bbls., dlvd	lb.	.31	.32½
Yerba santa leaves, bls	lb.	.40	.42
Yohimbine hydrochloride, bots, tin	oz.	3.75	4.25

Z

Zein, bgs., 36,000-lb. lots or more	lb.	.38	—
1,000 to 36,000-lb. lots, works	lb.	.40	—
smaller lots, works	lb.	.43	—
Zinc acetate, NF VIII, dms.	lb.	.53	—
tech., dms., works	lb.	.29½	.29¾
Borate, bgs., c.l., dlvd. E.	lb.	.192	—
l.c.l. dlvd E	lb	202	—
Chloride, NF, gran., dms.	lb.	.42	—
precip., powd., dms.	lb.	.26	—
soln., 50% dms. c.l., works.	100 lbs.	5.80	—
l.c.l., works	100 lbs.	6.40	—
tanks, works	100 lbs.	5.15	—
tech., fused, dms., c.l., works.	100 lbs.	10.70	—
l.c.l., works	100 lbs.	11.20	—
gran. fib. dms., c.l., works	100 lbs.	11.45	—
l.c.l., works	100 lbs.	11.95	—
Zinc chromate (see Yellow, zinc), Cyanide, kgs. 1,000-lb. lots or more, works	lb.	.523	—
smaller lots, works	lb.	.543	—
Dust, pigment, bbls., c.l., works	lb.	.17½	—
l.c.l., works	lb.	.18½	—
Fluoride bbls., works	lb.	.49	.50
Hydrosulfite, dms., c.l., frt. alld	lb.	.21½	—
l.c.l. frt. all.	lb	22	37½
Metal, prime western slabs, E. St. Louis	lb.	.13½	—
New York	lb.	.14	—
Naphthenate, liq., 8% Zn., dms., frt. Alld	lb.	.24½	—
10% Zn dms frt. alld	lb.	.30	—
Nitrate, tech., cryst., bbls. works.	lb	.20	—
Oxide pigment, American process, lead-free, bgs., c.l., frt. alld	lb.	.14½	—
l.c.l. same basis	lb.	.15½	—
leaded, 35% bgs., c.l., mills, frt alld	lb.	.15½	—
l.c.l. same basis	lb.	.16½	—
50%, bgs., c.l., same basis	lb.	.15⅞	—
l.c.l. same basis	lb.	.16⅞	—
French process, comt., green seal, bgs., c.l., frt. alld	lb.	.15¾	—
l.c.l. same basis	lb.	.16¾	—
red seal bgs. c.l. same basis	lb.	.15¼	—
l.c.l. same basis	lb.	.16¼	—
white seal, bgs., c.l., same basis	lb.	.16¼	—
l.c.l. same basis	lb.	.17¼	—
USP, ctns., c.l., frt. alld	lb.	.17¼	—
l.c.l. same basis	lb	.18¼	—
Zinc oxide Pac. coast prices 1c. higher.			
Phenolsulfonate, NF gran., dms	lb.	.39	—
powd. dms	lb	42	49
Resinate precip., 7.2-7.6% Zn., dms frt alld	lb.	.29	—
Silicofluoride, dms., works	lb.	.12½	.14
Stearate tech. USP ctns c.l	lb.	.39	—
	lb.	.39	—
l.c.l	lb	40	.44
Sulfate, powd., monohydrate, 36% Zn bgs. c.l. dlvd E	100 lbs	8.75	—
l.c.l., dlvd E	100 lbs	9.75	—
Zinc sulfate in bbls 40c higher			
USP gran dms	lb	.26	—
Sulfide, pure bgs. c.l., dlvd	lb.	.2530	—
Undecylenate, dms	lb	2.25	2.50
Yellow (see Yellow zinc)			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	—
bbls., c.l., works	100 lbs.	10.85	—
l.c.l., works	100 lbs.	11.35	—
Zinc-formaldehyde sulfoxylate, basic, dms., c.l	lb.	.25½	—
l.c.l.	lb.	.26	—
Zircon (G) gran. bgs. c.l. works.	lb.	.03⅛	—
5 tons to c.l., works	lb.	.03⅜	—
1 ton to 9,999-lb lots, works.	lb.	.04	—
smaller lots works	lb	.06⅛	—
milled, bgs., c.l., works	lb.	.04⅛	—
5 tons to c.l., works	lb.	.04⅜	—
1 ton to 9,999-lb lots works.	lb	04⅜	—
500-1,999-lb. lots, works	lb	07½	—
Zircon (G) in barrels 1c. higher.			
Zirconium acetate, 13% com., ZrO, c.l. 30,000 lbs minimum, works	lb	.23	—
Hydride, cns., works	lb.	7.00	8.45
Nitrate, dms., ex whse	lb.	4.50	7.00
Oxide 92½-99%, white grd., bbls. or bgs. works	lb.	1.50	—
lump, electric-fused bgs.,			
lump, electric-fused, bgs., c.l., works	lb.	.44	—
5-ton lots, works	lb.	.44½	—
1 ton to 9,999-lb lots, lbs works	lb	.45	—
CP white, grd. bbls., or bgs., works	lb.	1.50	—
lump electric fused, bags, 500 to 1,999-lb lots, works	lb.	.45½	—
smaller lots, works.	lb.	.48	—
milled, electric-fused bgs., c.l., works	lb.	.59	—
5-ton lots, works	lb.	.59½	—
1 ton to 9,999-lb lots, works	lb.	.60	—
500 to 1,999-lb lots, works	lb.	.60½	—
smaller lots, works.	lb.	.63	—
Oxychloride, cryst., ctns., 5-ton lots, works	lb.	.35½	—

Bids Wanted

Bis (2-ethylhexyl) hydrogen phosphite, 4,100 lbs., commercial grade, inv. 66, Nov. 29, Contracting Officer, Army Chem. Center, Md.

Calcium carbide, 200,000 lbs., tech., CAO., inv. 153, Nov. 27, Commander Pudget Sound Naval Shipyard, Bremerton, Wash.

Calcium hypochlorite, 870 5-lb. cans, tech., inv. 19, Nov. 27, Contracting Officer, San Francisco Chem. Procurement Dist. 1515 Clay St., Oakland 12, Calif.

Chromic acid, 40,000 lbs., tech., inv. 106, Dec. 10, Small Business Only, Commanding Officer, Watervliet Arsenal, Watervliet, N. Y.

Drugs, 528 1-lb. bots. chloroform, 130,560 ¼-lb. cans ether, 2,880 ¼-lb. bots. carbon tetrachloride, 1,248 ¼-lb. bots. acetic anhydride, 960 ¼-lb. bots. amyl alcohol, 3,264 ¼-lb. bots. butyl alcohol, analyzed reagent, inv. 439, Nov. 30, 720 1-lb. bots. acetylsalicylic acid, 620 1-lb. cans calcium carbonate precip., 1,116 10-lb. cans barium sulfate, 456 1-lb. bots. kaolin NF, 1,686 5-lb. bots. soda lime, inv. 442, Nov. 30, 2,832 1-lb. bots. potassium iodine, 1,872 1-lb. bots. sodium bicarbonate, 1,416 1-lb. bots. sodium phosphate tribasic, 24 bots of 500 gm. sodium silicate, inv. 440, Nov. 30, Armed Services Med. Procurement Agency, Navy Dept., 84 Sands St., Bklyn. 1, N. Y.

Ethyl alcohol, 68,000 lbs., inv. 52, Dec. 5, Naval Powd. Factory, Navy Dept., Indian Head, Md.

Insecticides, 23,016 aerosols, low pressure, inv. RIW-91680-R, Nov. 30, Gen. Services, Adm., Region 3, Business Service Center, 7th & D Sts., SW, Washington 25, D.C.

Paint, varnish and stains as required during 11 month period, inv. SE4S-822, Nov. 29, Gen. Services Adm., 909 First Ave., Seattle 4, Wash.: 500 gals. interior, semigloss enamel, inv. R2C-81600-R, Nov. 27, Gen. Services Adm., Region 3, Business Service Center, 7th & D Sts., S.W., Washington 25, D.C.; 5,388 qts. bleached shellac varnish, type I, inv. (4)-807, Dec. 5, 8,000 qts. orange shellac varnish, type II, inv. (4)-815, Dec. 5, 221,400 lbs. copper cuprous oxide pigment, inv. (4)-802, Dec. 6, 142,600 lbs. cuprous oxide pigment, inv. (4)-801, Dec. 6, 1,045,000 lbs. alkyd resin, inv. (4)-804, Dec. 5, Gen. Stores Supply Office, 700 Robbins Ave., Phila. 11, Pa.

Sodium metasilicate, 21,500 lbs., anhyd., inv. 69787, Dec. 3, Gen. Services Adm., P.O.B. 39, Canal St. Station, N. Y. 13, N. Y.

Sodium thiosulfate, 200 100-lb. contrs., photographic, inv. SE3-1163, Nov. 27, Gen. Services Adm., 909 First Ave., Seattle 4, Wash.

Zinc sulfate, 672 1-lb. bots. inv. 440, Nov. 30, Armed Services Med. Procurement Agency, Navy Dept., 84 Sands St., Bklyn. 1, N. Y.

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ADMA Sets Up

—*Continued from page 5*

Council, with particular attention being devoted to cancer and heart diseases.

Congress appropriated nearly $20 million for cancer research alone last session, and as part of this program, the Public Health Service has set up a cancer research center to screen drugs for their possible cancer-inhibiting qualities.

With the so-called tranquillizer drugs rapidly becoming an important tool of doctors, PHS also has just established a center for special studies of these drugs.

The three-man ADMA committee will devote its attention primarily to the programs of NIH and NRC, but will be interested also in clinical work being done by the Veterans' Administration and other federal agencies.

Its aims will be to keep abreast of the studies being performed by the government and lend its cooperation where called upon. The committee will be aided by an advisory scientific group of five members appointed by Mr. Beesley.

Nitrogen Plants

—*Continued from page 7*

to give a fixed nitrogen content of 20.5 percent, using the process of electrolytic decomposition of water and liquefaction of air.

The plant will have a capacity of 70,000 to 80,000 tons per year of fixed nitrogen. Associated with the fertilizer factory will be a plant to produce about fifteen to seventeen tons of heavy water annually.

Provisional planning for the plant at Neiveli envisions production of about 70,000 tons of fixed nitrogen annually in the form of urea and sulfate-nitrate from nearby lignite deposits, using the gassification of lignite process.

The Rourkela plant will produce about 80,000 tons of fixed nitrogen annually in the form of diluted ammonium nitrate, using nitrogen and oxygen obtained as byproducts from the Rourkela steel plant.

The Bombay facility will put out 95,000 tons annually in the form of urea and sulfate-nitrate, using refinery gases.

General Electric Sells

—*Continued from page 3*

destroyed by an explosion and fire on March 21.

Part of General Electric's chemical and metallurgical division, the chemical materials department manufactures phenolic resins and compounds, and magnesium oxide and 'Methylon' coating resins at its Pittsfield, Mass., headquarters. Located at Schenectady is the department's newly-formed insulating materials section which offers to both internal and external markets an integrated line of compatible insulating materials.

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